Form OGC-1a

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

5. Lease Designation and Serial No.: Fee

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

6. If Indian, Allottee or Tribe Name:

1a. Type of Work: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

7. Unit Agreement Name: Anschutz Ranch East

b. Type of Well: Oil Well [ ] Gas Well [X] Other Single Zone [ ] Multiple Zone [ ]

8. Farm or Lease Name: W30-13

2. Name of Operator: AMOCO PRODUCTION COMPANY

9. Well No.: W30-13

3. Address of Operator: P. O. BOX 829, EVANSTON, WYOMING 82930

10. Field and Pool, or Wildcat: ✓ Anschutz Ranch East

4. Location of Well (Report location clearly and in accordance with any State requirements.*)
At surface: SE/4 SE/4 Sec. 25, 450' FEL & 530' FSL
At proposed prod. zone: BHL 100' FSL & 200' FWL Sec. 30, T4N, R8E

11. Sec., T., R., M., or Blk. and Survey or Area: Sec. 25, T4N, R7E

14. Distance in miles and direction from nearest town or post office*: 20 miles South of Evanston

12. County or Parrish: Summit 13. State: Utah

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. line, if any): 100'

16. No. of acres in lease:

17. No. of acres assigned to this well: 80

18. Distance from proposed location* to nearest well, drilling, completed, or applied for, on this lease, ft.: 550'

19. Proposed depth: 14,650' nugget

20. Rotary or cable tools:

21. Elevations (Show whether DF, RT, GR, etc.): 7845' graded ground

22. Approx. date work will start*: Approval of APD

23. PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
26"	20"	94#	300'	to surface
17 1/2"	13 3/8"	61,68#	5350'	to surface
12 1/4"-16"	9 5/8"-10 5/8"	47,53.5,101.4#	12550'	TD - 10900'
8 1/2"	7"	26,32#	14650'	TD - 10900'

RECEIVED
JUL 22 1986
DIV. OF OIL, GAS & MINING

AMOCO PROPOSES DRILLING TO DEVELOP NUGGET RESERVES

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
DATE: 7/23/86
BY: [illegible]
WELL SPACING: 203

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

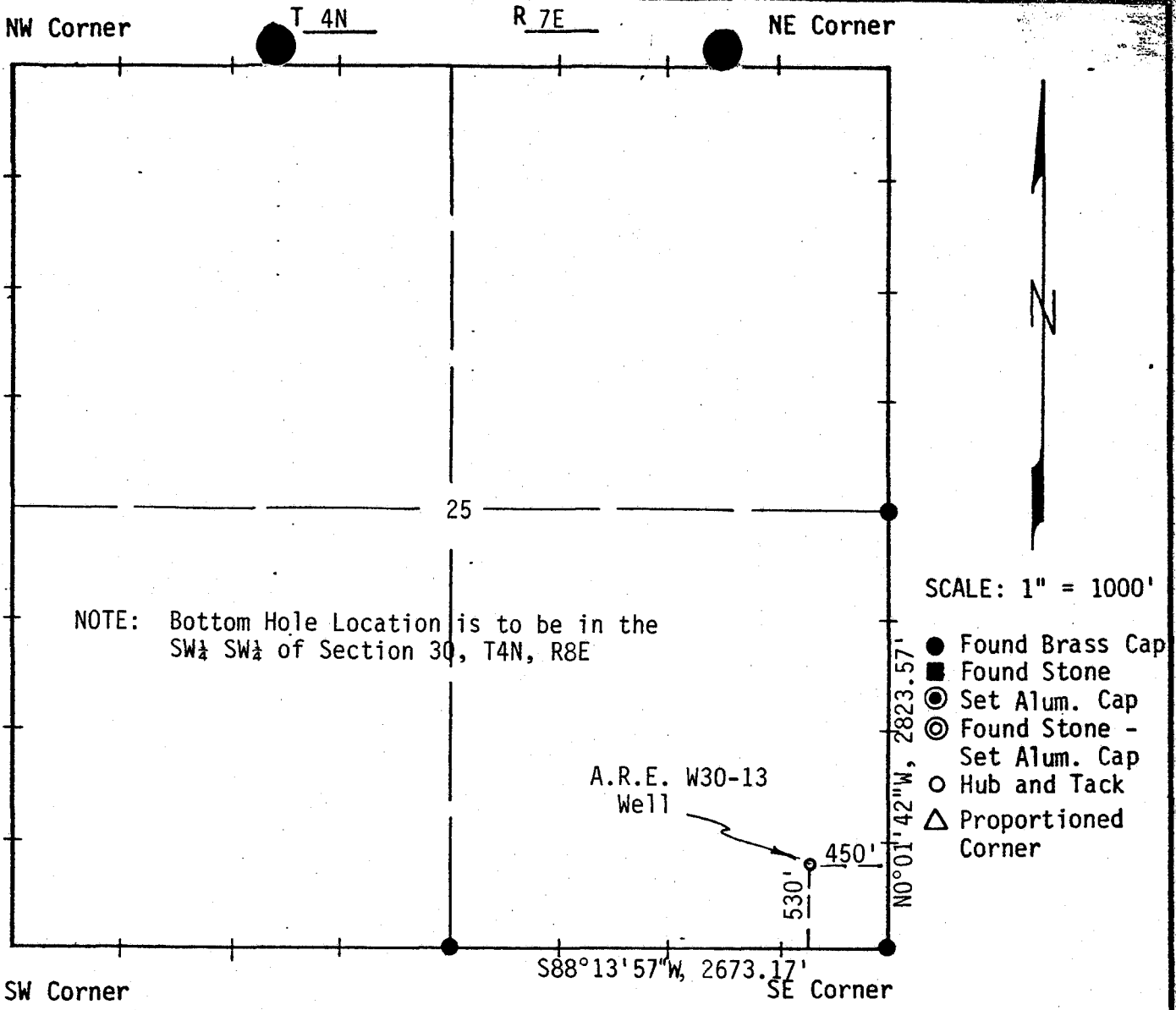
Signed: Walter G. Shoffer Title: District Drilling Supervisor Date: 7-18-86

(This space for Federal or State office use)

Permit No. 43-043-30279 Approval Date

Approved by Title Date
Conditions of approval, if any:

*See Instructions On Reverse Side



I, John A. Proffit of Evanston, Wyoming certify that in accordance with a request from Craig Griffith of Evanston, Wyoming for Amoco Production Co. I made a survey on the 10th day of July, 1986 for Location and Elevation of the A.R.E. W30-13 as shown on the above map, the wellsite is in the SE-1/4 SE-1/4 of Section 25, Township 4N, Range 7E of the SLB & M, Summit County, State of Utah, Elevation is 7860 Feet #5 Steel Rebar Datum 3 dimension control net tied to USGS & GS Monuments (1929 NGVD)

Reference point

Reference point

Reference point

Reference point

JOHN A. PROFFIT Registered 2860 Land Surveyor STATE OF UTAH

John A. Proffit 7/18/86

John A. Proffit, Utah R.L.S. NO. 2860

BOOK NO: 477
DATE: 7/18/86
JOB NO.: 86-10-26

UINTA ENGINEERING & SURVEYING, INC.
808 MAIN STREET, EVANSTON, WYOMING

10-Point Drilling Program

(W30-13)

1) Geologic name fo the surface formation: Tertiary

2) Estimated tops of geological markers:

Formation	Depth
Frontier	2,100'
Aspen	5,300'
Bear River	5,910'
Gannet	7,350'
Preuss	10,250'
Salt	11,350'
Twin Creek	12,450'
#Nugget	13,850'
Total Depth	14,650'

3) Anticipated depths to encounter water, oil, gas or other mineral-bearing formations:

Substances	Depth
Oil Gas, Water	13,850'

4) Casing Program:

Hole Size	Casing	Wt/Ft	Grade	Threads	Cemented Depth
26"	20"	94#	H40	STC	300'
17 1/2"	13 3/8"	61,68#	S80	BTC	5350'
12 1/4"	9 5/8"-10 5/8"	47,53.5,101.4#	HC95, P110	LTC & x-line	12550'
8 1/2"	7"	26,32#	N80	BTC, LTC	14650'

13 3/8" casing will be cemented from setting depth to surface.

5) Operators minimum specifications for pressure control equipment are explained on the attached schematic diagram. After running surface casing and prior to drilling out, the BOP and other pressure equipment will be tested to the full working pressure rating as shown on the attached diagram. BOPs will be tested every 30-day interval and after every string of casing is run. Thereafter, the BOP will be checked daily for mechanical operations only and will be noted on the IADC Daily Drilling Report.

6) Mud Program:

Interval	Type Mud	Wt #/gal	Viscosity	WL CC/30M
0-5350'	LSND-Spud	8.6-9.2#	Sufficient to clean and stabilize hole.	
5350'-12550'	Invert	7.7-11.5#		
12550'-TD	Water LSND	8.33-8.9#		

7) Auxiliary Equipment:

Kelly cock; sub with full opening valve 3" choke manifold with remote control choke; monitor system on pit level, audio and visual; mudlogger (2-man type) w/chromatograph. Mudlogger run from Salt Top to TD....

8) Testing Program:

DSTs None

Logging Program:

DIL-GR	Base of surface casing to TD
Long Spaced Sonic-GR	Base of surface casing to TD
FDC-CNL-GR-Cal	Base of surface casing to TD
HDT Dipmeter	Base of surface casing to TD
SHDT Dipmeter	Base of surface casing to TD
Check Shot Velocity	Base of surface casing to TD
Gyro Directional	Base of surface casing to TD

Coring Program: None

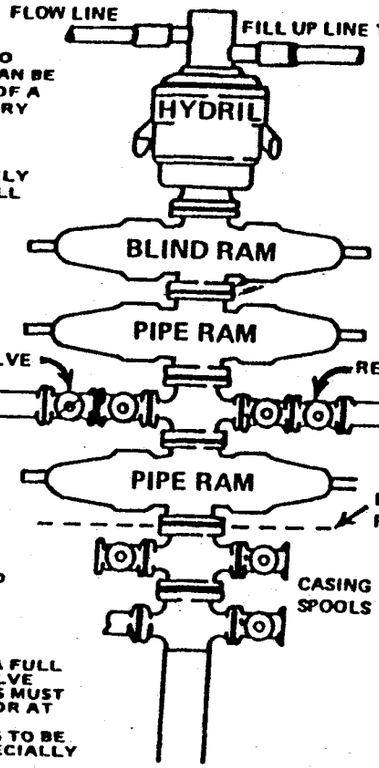
9) No abnormal pressures or temperatures are anticipated.

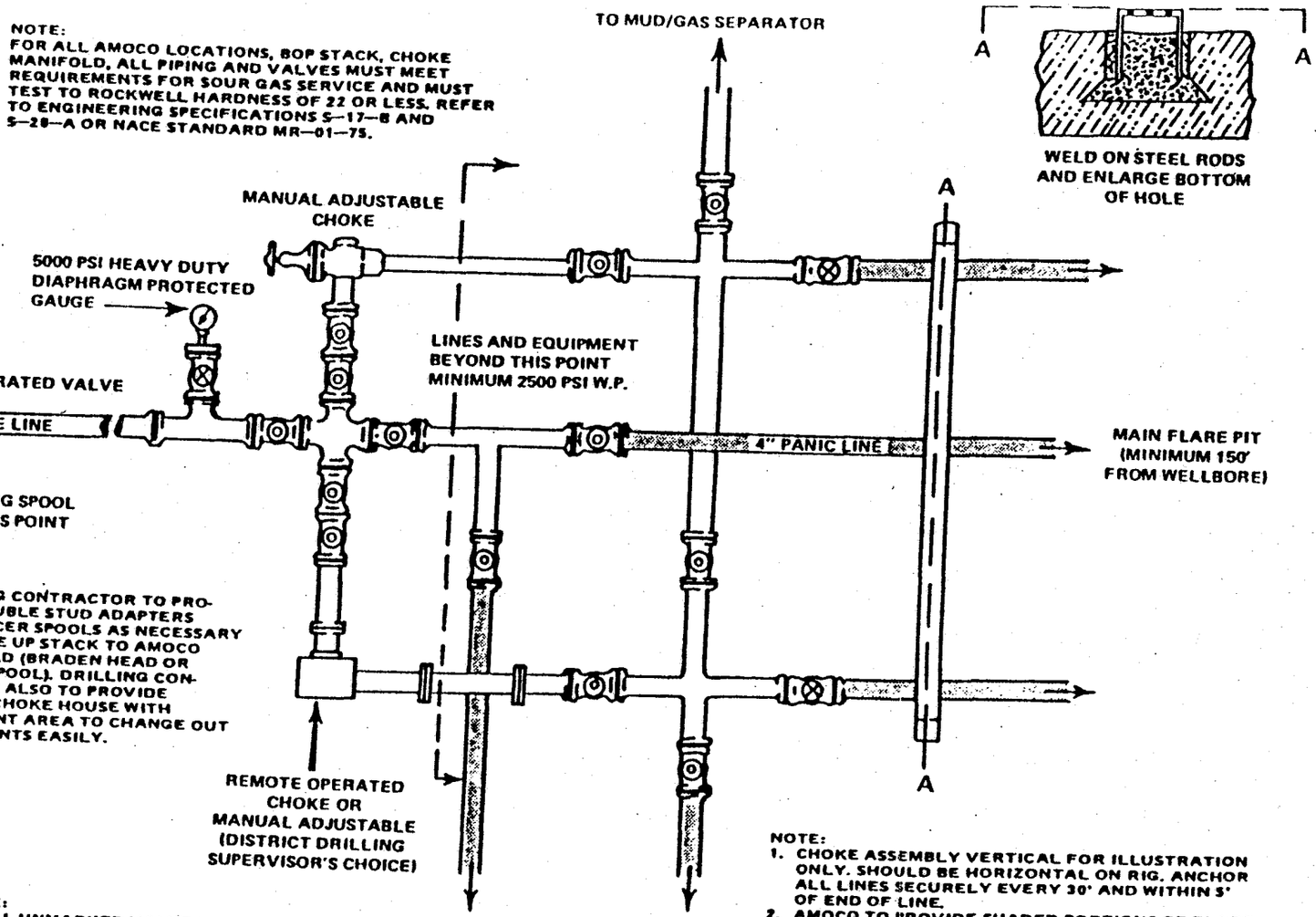
10) Anticipated starting date will be when approved and the duration of drilling operations will be approximately 120 days.

MINIMUM BLOW-OUT PREVENTER REQUIREMENTS
5,000 psi W.P.

NOTE:
1. DRILLING NIPPLE TO BE SO CONSTRUCTED THAT IT CAN BE REMOVED WITHOUT USE OF A WELDER, THROUGH ROTARY TABLE OPENING; WITH MINIMUM I.D. EQUAL TO PREVENTER BORE.
2. WEAR RING TO BE PROPERLY INSTALLED IN HEAD AT ALL TIMES WHILE DRILLING.
3. UPPER TWO SETS OF RAMS MAY BE A DOUBLE UNIT.

NOTE:
FOR ALL AMOCO LOCATIONS, BOP STACK, CHOKE MANIFOLD, ALL PIPING AND VALVES MUST MEET REQUIREMENTS FOR SOUR GAS SERVICE AND MUST TEST TO ROCKWELL HARDNESS OF 22 OR LESS. REFER TO ENGINEERING SPECIFICATIONS S—17—B AND S—28—A OR NACE STANDARD MR—01—75.





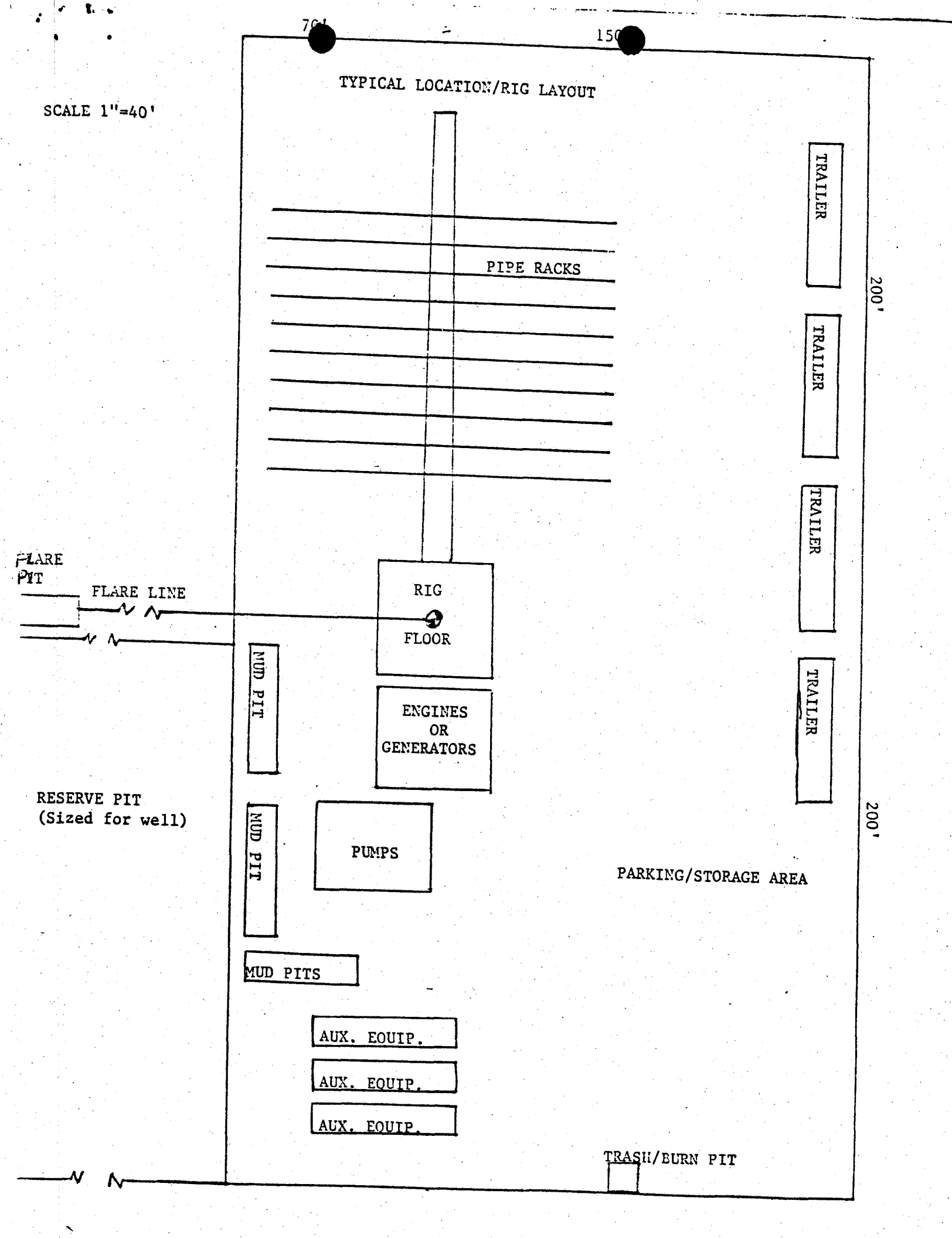
WELD ON STEEL RODS AND ENLARGE BOTTOM OF HOLE

NOTE:
1. BLOW OUT PREVENTER AND ALL FITTINGS MUST BE IN GOOD CONDITION 5000 PSI W.P. MINIMUM.
2. ALL FITTINGS ARE TO BE FLANGED.
3. A STRING INSIDE BOP AND A FULL BORE, 5000 W.P. SAFETY VALVE WITH PROPER CONNECTIONS MUST BE AVAILABLE ON RIG FLOOR AT ALL TIMES.
4. ALL CHOKE AND KILL LINES TO BE SECURELY ANCHORED, ESPECIALLY ENDS OF CHOKE LINES.
5. KILL LINE MUST BE CONNECTED AT ALL TIMES.
6. EQUIPMENT THROUGH WHICH BIT MUST PASS SHALL BE AS LARGE AS INSIDE DIAMETER OF THE CASING BEING DRILLED THROUGH.
7. MUST HAVE KELLY COCK ON KELLY.
8. EXTENSION WRENCHES AND HAND WHEELS TO BE PROPERLY INSTALLED AND BRACED AT ALL TIMES.
9. RIG FLOOR BLOW-OUT PREVENTER CONTROL TO BE LOCATED AS CLOSE TO DRILLER'S POSITION AS FEASIBLE.
10. BLOW-OUT PREVENTER CLOSING EQUIPMENT TO INCLUDE ENOUGH CAPACITY TO OPERATE BOP'S OPEN/CLOSE TWICE, TWO INDEPENDENT SOURCES OF PUMP POWER ON EACH CLOSING UNIT INSTALLATION.
11. EXTEND KILL LINE 150' FROM WELLBORE FOR AUXILIARY HOOKUP CAPABILITY.
12. NO COLLECTOR BOTTLES, SURGE TANKS OR BUFFER CHAMBERS DOWNSTREAM OF THE CHOKE MANIFOLD.
13. THE CHOKE LINE FROM THE STACK TO THE MANIFOLD MUST BE STRAIGHT.
14. IF A FLEXIBLE HOSE IS TO BE USED AS A CHOKE LINE, IT MUST BE APPROVED BY AMOCO PRIOR TO RIGGING UP.

NOTE:
DRILLING CONTRACTOR TO PROVIDE DOUBLE STUD ADAPTERS AND SPACER SPOOLS AS NECESSARY TO NIPPLE UP STACK TO AMOCO WELLHEAD (BRADEN HEAD OR CASING SPOOL). DRILLING CONTRACTOR ALSO TO PROVIDE HEATED CHOKE HOUSE WITH SUFFICIENT AREA TO CHANGE OUT COMPONENTS EASILY.

NOTE:
1. ALL UNMARKED VALVES TO BE FULL-OPENING GATE OR PLUG VALVES, METAL TO METAL SEAL, 5000 PSI W.P.
2. ALL UNMARKED PIPE MINIMUM 3". REFER TO ENGINEERING SPECIFICATIONS S—17—B AND S—28—A AND NACE STANDARD MR—01—75 FOR APPROVED GRADES.
3. ALL WELDS MUST BE HEAT TREATED ACCORDING TO ENGINEERING SPECIFICATION S—28—A OR NACE STANDARD MR—01—75.

NOTE:
1. CHOKE ASSEMBLY VERTICAL FOR ILLUSTRATION ONLY. SHOULD BE HORIZONTAL ON RIG. ANCHOR ALL LINES SECURELY EVERY 30' AND WITHIN 5' OF END OF LINE.
2. AMOCO TO PROVIDE SHADED PORTIONS OF FLARE LINES. DRILLING CONTRACTOR TO BE RESPONSIBLE FOR PROVIDING REMAINING LINES AND VALVES.


TYPICAL LOCATION/RIG LAYOUT
SCALE 1"=40'
PIPE RACKS
TRAILER
TRAILER
TRAILER
TRAILER
200'
200'
FLARE PIT
FLARE LINE
RIG FLOOR
MUD PIT
ENGINES OR GENERATORS
RESERVE PIT (Sized for well)
MUD PIT
PUMPS
PARKING/STORAGE AREA
MUD PITS
AUX. EQUIP.
AUX. EQUIP.
AUX. EQUIP.
TRASH/BURN PIT

APD TECHNICAL REVIEW

OPERATOR Amoco Production Co. WELL NAME W30-13

LOCATION: SEC. Surface: 25 BHL: 30 T. 4N 4N R. 7E 8E

COUNTY Summit FIELD Anschutz Ranch East

LEASE: SURFACE Max Arnson MINERAL Amoco

OBJECTIVE FORMATION/DEPTH: Nugget @ 13,850'

SPACING: _____ FM OIL; 750' FM GAS (W31-04)

1000' Fm Injection (W36-08)

CONTACTS:

OPERATOR Amoco Production Co. John Greener PHONE # (307) 789-1700 x2384

DIRT CONTRACTOR Cerro Brothers in Evanston PHONE # ( )

SURFACE OWNER Max Arnson PHONE # (801) 289-2142

OTHER Walt Schaeffer, Field Foreman w/ Amoco PHONE # (307) 789-1700

OTHER _____ PHONE # ( )

PRE-SITE INSPECTION DATE: 7/25/86

PAD CONSTRUCTION DATE: August 1986 INSPECTION DATE: _____

SPUD DATE: September 1986 INSPECTION DATE: _____

TD DATE: 120 days after spud INSPECTION DATE: _____

REHAB COMPLETION DATE: Summer 1987 INSPECTION DATE: _____

SUBSURFACE GEOLOGY:

ABNORMAL PRESSURES: None anticipated

WATER ZONES: @ 13,850' in Nugget

OIL ZONES: _____

GAS ZONES: (Gas Condensate) in Nugget @ 13,850'.

CHECKLIST (BY WHOM AND WHEN):

GEOLOGY (SURFACE FM, TOPS & TD) O.K. CR. 7/28/86

H_2S IN AREA None - CR 7/28/86 HYDROLOGY OK CR 7/28/86

SPACING (existing wells, etc.) 80 acre spacing

CASING PROGRAM _____ MUD PROGRAM _____

SUBSURFACE PRESSURES _____ LOG PROGRAM _____

SITE LAYOUT O.K. CR. 7/28/86 RESERVE PIT unlined 7/28/86 CR

PRODUCTION PIT _____ WATER SUPPLY From permitted H_2O well.

DESIGNATION OF OPERATOR Amoco Prod. Co.

REHABILITATION PROGRAM Fill in pit + reseed

STATE OF UTAH
DIVISION OF OIL, GAS & MINING
DRILLING LOCATION ASSESSMENT

OPERATOR Amoco Production Co. WELL NAME W30-13

LOCATION: COUNTY Summit SECTION Surface 25 BHL 30 T Surface 4N BHL 4N R Surface 7E BHL 8E

QTR/QTR SE SE Surface 450' FEL BHL 200' FWL & Surface 530' FSL BHL 100' FSL

SURFACE OWNERSHIP Max Arnson MINERAL LEASE # Fee

ASSESSMENT PARTICIPANTS: DATE 7 / 25 / 86

John Greener — Amoco Prod. Co. (307) 789-1700 x2384

Carol Revelt — DOGM

I. REGIONAL SETTING/TOPOGRAPHY

Utah thrust belt. Location is in a steep NE trending valley which extends from the NE section of Porcupine Ridge.

II. LAND USE

A. Current Surface Use:

Grazing for game animals. Source of wood for beaver dams. Area is too steep & overgrown for domestic animals.

B. Proposed Surface Disturbance:

Will modify area to accomodate a 1/2 mile access road above the stream bed, a 400'x220' pad, and a 9350 ft.^{2} reserve pit. Anticipate 67,943 yds^3 of cut material and 39,411 yds^3 of fill material to excavate pad to a 7845.0' elevation.

C. Affected Floodplains and/or Wetlands:

EDGE OF FILL WILL BE LOCATED ~50-75' from a BEAVER POND and STREAM WHICH IS PART OF THE HEADWATERS OF THIEF CREEK. ACTUAL WELL LOCATION IS ABOUT 250' from BEAVER POND. SEVERAL OTHER BEAVER PONDS LOCATED ~1/2 MILE DOWNSTREAM. THIEF CREEK-YELLOW CREEK FLOOD PLAIN IS LOCATED 5 MILES DOWNSTREAM. NO EVIDENCE of FLOWING SPRING IN THE STAND OF ASPENS WHERE WELL IS LOCATED - IF SPRINGS ARE FOUND DURING EXCAVATION APC WILL PUT BENTONITE OVER THEM.

III. ENVIRONMENTAL PARAMETERS

A. Geology:

1. Surface Formation -

TERTIARY WASATCH FORMATION (INTERBEDDED CONGLOMERATES + SHALES) COVERED BY WELL DEVELOPED SOILS

2. Stability -

UNALTERED WELL LOCATION IS STABLE - IS SURROUNDED AND COVERED BY LARGE TREES AND DENSE FOLIAGE. ~500' ABOVE LOCATION some SLUMPING HAS OCCURRED ON A STEEP, NON-VEGETATED SLOPE. AFTER SITE IS CONSTRUCTED THE 80' CUT SLOPE WILL BE THE MOST UNSTABLE however the AREA ABOVE THE CUT IS VEGETATED. LOCATION PROTECTED FROM ABOVE SLUMPING by ASPENS.

B. Soils:

1. Soil Characteristics -

SOIL IN BOTTOM OF VALLEY IS A BROWN SANDY-SILTY LAYER.

2. Erosion/Sedimentation -

ONLY EROSIONAL FEATURE NEAR SITE IS A SLUMP ZONE ~500' ABOVE LOCATION. IF FILL SLOPES FAIL MATERIAL WILL END UP IN BEAVER POND BELOW. IF 80' CUT SURFACE ERODES SOME MATERIAL MAY END UP IN RESERVE PIT.

C. Water Resources:

STREAMS WITHIN ANSCHUTZ RANCH EAST ARE OF A SUB-PARRELL ORIENTATION.* NO EVIDENCE OF SPRINGS FOUND NEAR WELL SITE BUT IF THEY ARE ENCOUNTERED DURING EXCAVATION AMOCO WILL TRY TO CONTAIN THEM. IF AN ACCIDENT OCCURRED ON LOCATION MOST OF THE CONTAMINATED WATER/FLUIDS WOULD PROBABLY BE CONTAINED IN THE BEAVER PONDS DOWNSTREAM.

*STREAMS FLOW INTO YELLOW CREEK AND THEN TO BARKER RESERVOIR.

D. Flora/Fauna:

FLORA: MATURE SPRUCE NEAR STREAM BED; MATURE ASPENS @ LOCATION + UPSLOPE FROM IT MANY OF WHICH WILL BE REMOVED DURING EXCAVATION; DENSE GROWTH OF SMALL BUSHES, SHRUBS, GRASSES + WILDFLOWERS (YARROW, ASTERS, THISTLE, FIELD MINT, YERBA MANSON). FAUNA: ELK, DEER, MOOSE, BEAVER.

E. Cultural Resources/Archeology:

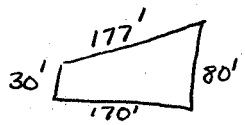
LOCATION IS ON FEE LAND - HAVE OPTED TO FOREGO SURVEY. NO APPARENT ARCHAEOLOGICAL/CULTURAL REMAINS IN DANGER.

F. Adequacy of Restoration Plans:

WILL RESTORE PIT + RESEED. LANDOWNER GETS ALL THE TREES THAT ARE REMOVED TO MAKE PAD LOCATION CUT INTO 18" LOGS + STACKED BY AMOCO. LANDOWNER ALSO REQUESTED THAT AMOCO ADD AN ADDITIONAL 6" GRAVEL LAYER ON THE ACCESS ROAD TO THIS LOCATION

IV. RESERVE PIT

A. Characteristics:



30' × 80' × 170' × 177' × 10' DEPTH WITH A CAPACITY OF 22,600 BBLS. PIT IS 100% ON CUT. STEEPEST CUT FOR PAD LOCATION (~80') IS NEAR FAR WEST CORNER OF RESERVE PIT (AT INTERSECTION OF 30' + 177' SIDES) - SEE ATTACHMENT #2.

B. Lining:

NONE - SURFACE FORMATION CONTAINS BENTONITIC CLAY WHICH PROVIDES IMPERMEABLE LAYER.

V. OTHER OBSERVATIONS

1. ANSCHUTZ CORP. IS PAYING FOR THIS WELL; 2.) THIS WELL IS AN ATTEMPT TO GET UP DIP FROM THE AMOCO-CHAMPLIN 187 AMOCO A#1 (25-4N-7E) which was dry; 3.) WELL WILL BE DEVIATED 700'; 4.) WILL START ACCESS ROAD @ THE W30-14 LOCATION; 5.) AMOCO IS CURRENTLY PERMITTING A WATER WELL FOR DRILLING PURPOSES; 6.) WILL TRY TO USE THE FRESH WATER MUD USED IN DRILLING THE UPPER SECTION of the W31-05 FOR DRILLING THE UPPER SECTION OF THIS WELL, TOO.; 7.) LOCATION has been moved SINCE receiving this APD - WILL RECEIVE A SUNDRY w/exact LOCATION. 8.) DIRT WORK at this LOCATION WILL COST ~ $90,000. 9.) WELL WILL BE DEVIATED ~700'.

VI. STIPULATIONS FOR APD APPROVAL:

1. INCREASE BLANKET BOND FROM $50000 to $80,000.

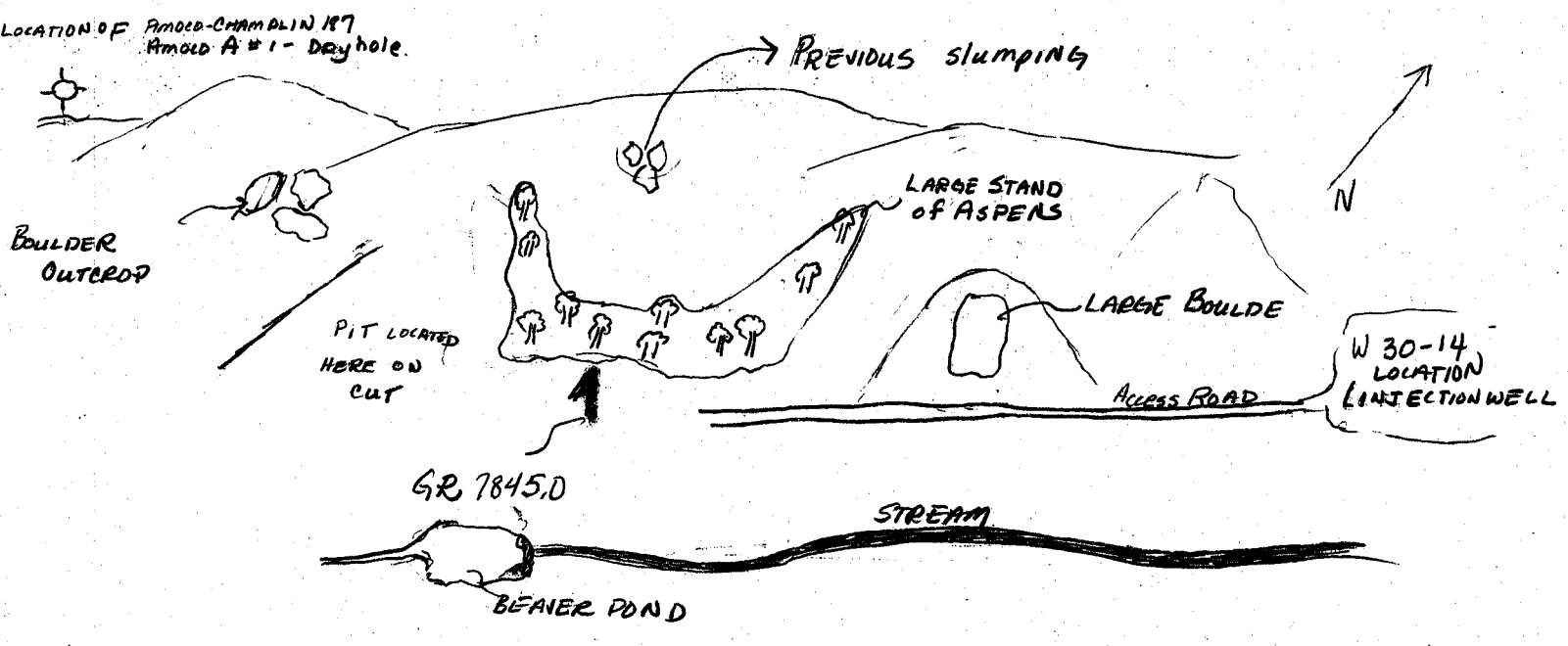
VII. ATTACHMENTS

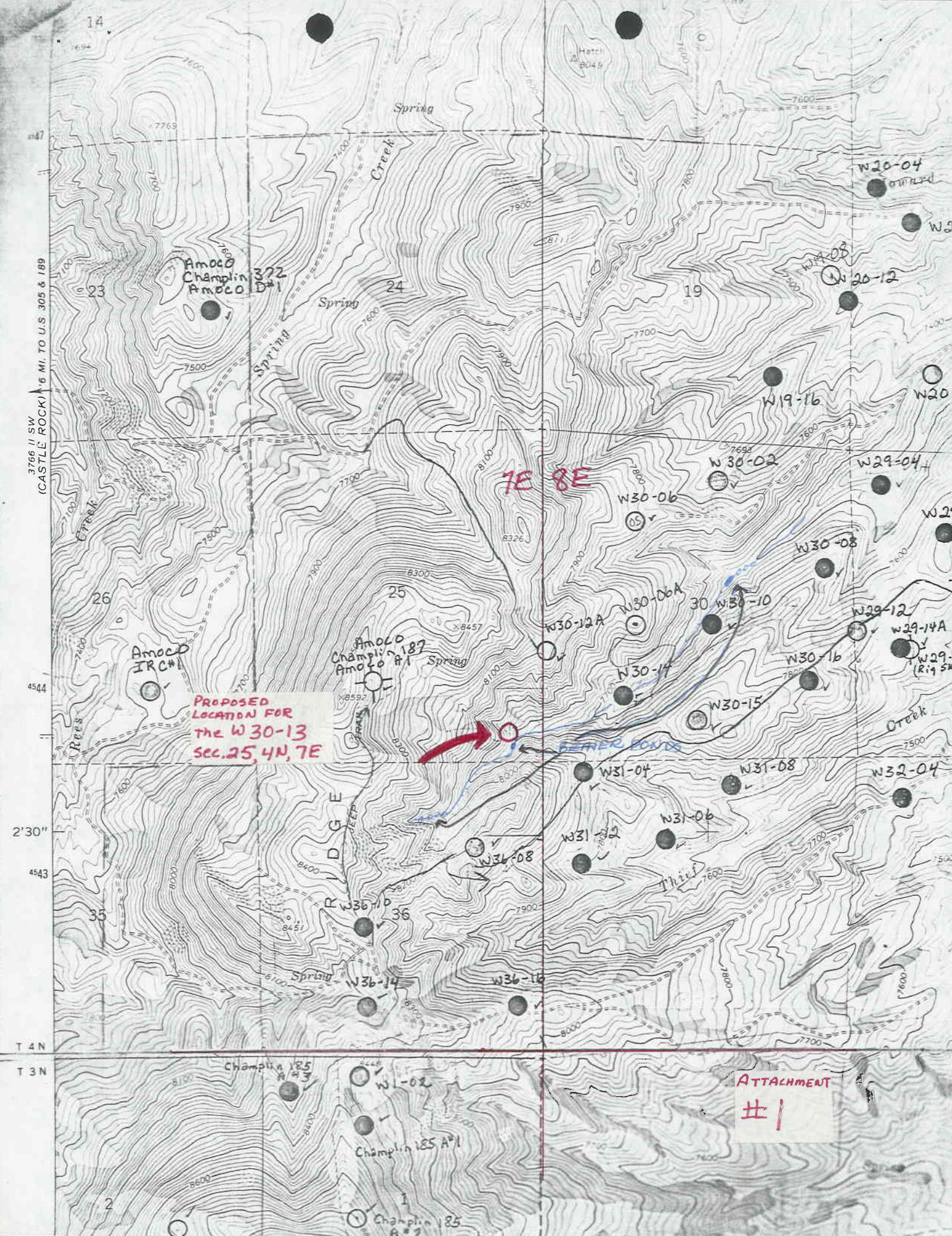
A. Sketch of Drill Site

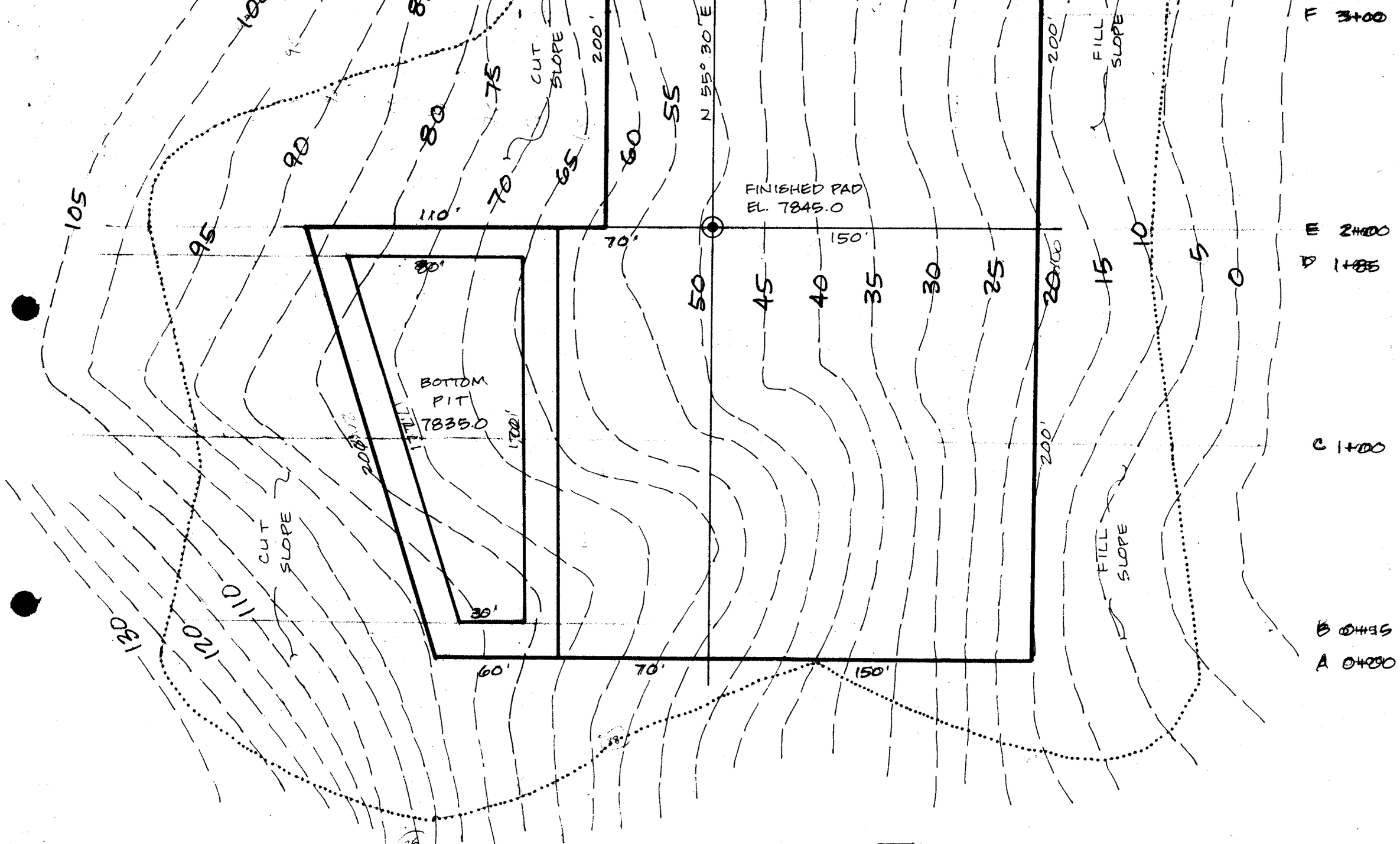
B. Photographs

C. Maps - See ATTACHMENT #1

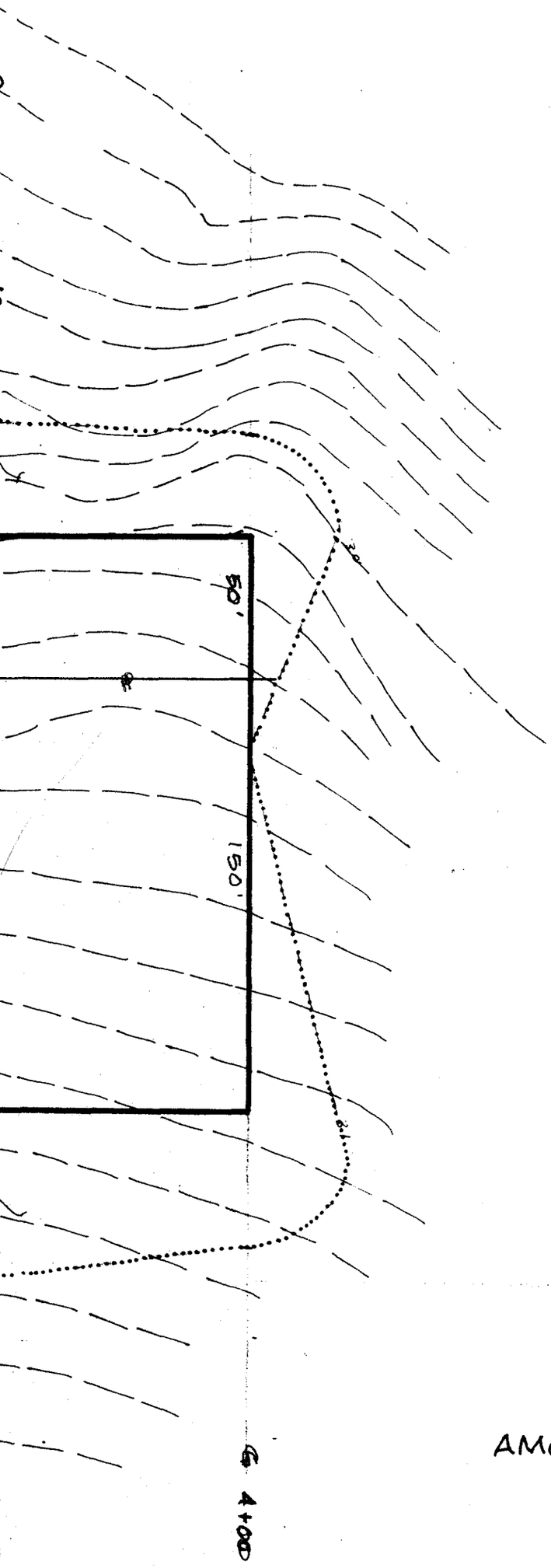
D. CUT DIAGRAM - SEE ATTACHMENT #2.

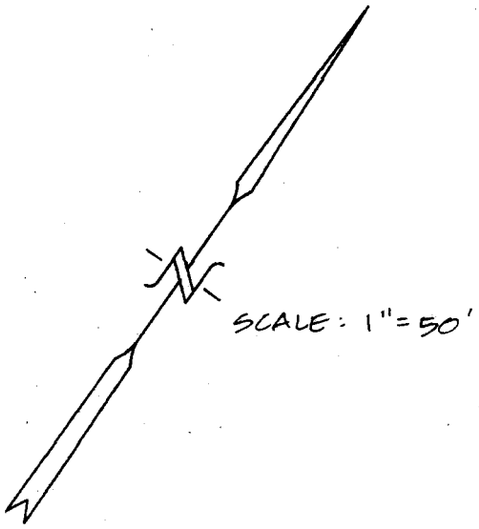



14
Spring
Creek
Hatch
8049
W20-04
W20-12
W19-16
W30-02
W29-04
W30-06
W30-08
W30-06A
W30-10
W30-12A
W30-14
W30-15
W30-16
W29-12
W29-14A
W31-04
W31-08
W32-04
W31-06
W31-12
W36-08
W36-10
W36-14
W36-16
Amoco
Champlin 322
Amoco D#1
23
24
19
7E 8E
Amoco
Champlin 187
Amoco A#1
Amoco
IRC#1
26
25
PROPOSED
LOCATION FOR
the W30-13
SEC. 25, 4N, 7E
BEAVER POND
Rees
Creek
Thief
Creek
RIDGE
JEEP
TRAIL
35
36
Champlin 185
A#3
W1-02
Champlin 185 A#1
Champlin 185
A#2
2
1
3766 II SW
(CASTLE ROCK) 6 MI. TO U.S. 305 & 189
4544
4543
2'30"
T 4 N
T 3 N
ATTACHMENT
#1



TOPOGRAPHY MAP OF AREA 30-13





PIT CAPACITY - 22,600 BBL

CU. YDS CUT - 67,943
CU. YDS. FILL - 39,411

TOPOGRAPHY MAP
of
A.R.E. W30-13 WELL
for
AMOCO PRODUCTION CO.

7-21-86 86-10-26

072913

OPERATOR Amoco Production Co DATE 7-22-86

WELL NAME Anschutz Ranch East W30-13

Surf SESE 25 4N 7E

SEC BHL 30(SWSW) T 4N R 8E COUNTY Summit

43-043-30279	Fee
API NUMBER	TYPE OF LEASE

CHECK OFF:

- [x] PLAT
- [x] BOND
- [x] NEAREST WELL
- [x] LEASE
- [x] FIELD
- [x] POTASH OR OIL SHALE

PROCESSING COMMENTS:

Unit Well

Need water permit

APPROVAL LETTER:

SPACING: [x] 203 Anschutz Ranch East UNIT [ ] 302

[ ] CAUSE NO. & DATE [ ] 302.1

STIPULATIONS:

1- Water

0218T

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple - 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

July 23, 1986

Amoco Production Company
P. O. Box 829
Evanston, Wyoming 82930

Gentlemen:

Re: Well Name: Anschutz Ranch East W30-13 - (Surf.) SE SE Sec. 25, T.4N, R.7E 530' FSL, 450' FEL; (BHL) SW SW Sec. 30, T.4N, R.8E - 100' FSL, 200' FWL, Summit County, Utah

Approval to drill the referenced well is hereby granted in accordance with Section 40-6-18, Utah Code Annotated, as amended 1983; and predicated on Rule 203, Oil and Gas Conservation General Rules, subject to the following stipulations:

1. Prior to commencement of drilling, receipt by the Division of evidence providing assurance of an adequate and approved supply of water as required by Chapter 3, Title 73, Utah Code Annotated.

In addition, the following actions are necessary to fully comply with this approval:

1. Spudding notification to the Division within 24 hours after drilling operations commence.

2. Submittal to the Division of completed Form OGC-8-X, Report of Water Encountered During Drilling.

3. Prompt notification to the Division should you determine that it is necessary to plug and abandon this well. Notify John R. Baza, Petroleum Engineer, (Office) (801) 538-5340, (Home) 298-7695, or R. J. Firth, Associate Director, (Home) 571-6068.

4. Compliance with the requirements and regulations of Rule 311.3, Associated Gas Flaring, Oil and Gas Conservation General Rules.

an equal opportunity employer

5. Prior to commencement of the proposed drilling operations, plans for toilet facilities and the disposal of sanitary waste at the drill site shall be submitted to the local health department having jurisdiction. Any such drilling operations and any subsequent well operations must be conducted in accordance with applicable State and local health department regulations. A list of all local health departments and copies of applicable regulations are available from the Division of Environmental Health, Bureau of General Sanitation, telephone (801) 533-6163.

6. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-043-30279.

Sincerely,

R. J. Firth
Associate Director, Oil & Gas

as
Enclosures
cc: D. R. Nielson

8159T

Form OGC-1b

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

101521

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL [ ] GAS WELL [X] OTHER

2. NAME OF OPERATOR: AMOCO PRODUCTION COMPANY

3. ADDRESS OF OPERATOR: P. O. BOX 829, EVANSTON, WYOMING 82930

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: SESE Sec. 25 382' FEL & 597' FSL

B-L: Sec 30, 4N 8E

5. LEASE DESIGNATION AND SERIAL NO.: Fee

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME: Anschtuz Ranch East

8. FARM OR LEASE NAME: W30-13

9. WELL NO.: W30-13

10. FIELD AND POOL, OR WILDCAT: Anschtuz Ranch East

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 25, T4N, R7E

14. PERMIT NO.: 43-043-30279

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 7845' Graded Ground

12. COUNTY OR PARISH: Summit

13. STATE: Utah

16. **Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	[ ]	PULL OR ALTER CASING	[ ]	WATER SHUT-OFF	[ ]	REPAIRING WELL	[ ]
FRACTURE TREAT	[ ]	MULTIPLE COMPLETE	[ ]	FRACTURE TREATMENT	[ ]	ALTERING CASING	[ ]
SHOOT OR ACIDIZE	[ ]	ABANDON*	[ ]	SHOOTING OR ACIDIZING	[ ]	ABANDONMENT*	[ ]
REPAIR WELL	[ ]	CHANGE PLANS	[ ]	(Other) Report of Operations			[ ]
(Other)			[ ]				

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Spud Date:	9-22-86
Depth:	3965'
Drilling Contractor:	Manning 33
Bit Size:	17.50"
Total Depth:	14,650'

Drilling Ahead

RECEIVED
OCT 08 1986
DIVISION OF
OIL, GAS & MINING

18. I hereby certify that the foregoing is true and correct

SIGNED [signature] TITLE Stf Fac Eng Supervisor DATE 10-6-86

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Expired 8-27-87

FILING FOR WATER IN THE STATE OF UTAH

102119

Rec. by _____
Fee Paid $ _____
Platted _____
Microfilmed _____
Roll # _____

APPLICATION TO APPROPRIATE WATER

For the purpose of acquiring the right to use a portion of the unappropriated water of the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of the Laws of Utah.

43.043.30279

WATER USER CLAIM NO. 21 - 1552 **APPLICATION NO. T61916**

1. **PRIORITY OF RIGHT:** July 17, 1986 **FILING DATE:** July 17, 1986

2. **OWNER INFORMATION**
   Name: Amoco Production Company
   Address: P.O. Box 829, Evanston, WY 82930
   The land is not owned by the applicant(s), see explanatory.

A.R.E. W-30-13

3. **QUANTITY OF WATER:** 150.0 acre feet (Ac. Ft.)

4. **SOURCE:** Underground Water Well **DRAINAGE:** Bear River-Summit County
   POINT(S) OF DIVERSION: **COUNTY:** Summit
   (1) S. 1603 feet, E. 401 feet, from the NW Corner of Section 21,
   Township 4 N, Range 8 E, SLB&M
   Description of Diverting Works: 14 inch diameter well 1204 ft.
   COMMON DESCRIPTION: Anschutz W21-04 Water Well

5. **STORAGE**
   Water is to be stored in Thief Creek Reservoir reservoir from January 1 to December 31.
   Capacity 0.5 ac.ft. innundating 0.25 acres. Height of dam 2 feet.
   The area innundated by the reservoir includes all or part of each of the following legal subdivisions.

			North East Quarter				North West Quarter				South West Quarter				South East Quarter			
TOWN	RANGE	SEC	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼
4 N	8 E	21						X										

All locations in Salt Lake Base and Meridian

6. **NATURE AND PERIOD OF USE**
   Oil Exploration From January 1 to December 31.

7. **PURPOSE AND EXTENT OF USE**
   Oil Exploratio: Drilling and completion operations oil/gas wells.

8. **PLACE OF USE**
   The water is used in all or parts of each of the following legal subdivisions.

			North East Quarter				North West Quarter				South West Quarter				South East Quarter			
TOWN	RANGE	SEC	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼
4 N	8 E	30											X					
4 N	8 E	31							X									

All locations in Salt Lake Base and Meridian

30.13

Appropriate

Form OGC-1b

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL [ ] GAS WELL [X] OTHER

2. NAME OF OPERATOR: AMOCO PRODUCTION COMPANY

3. ADDRESS OF OPERATOR: P. O. BOX 829, EVANSTON, WYOMING 82930

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface
SE/4 SE/4, Sec. 25, 382' FEL & 597' FSL
BHL 100' FSL & 200' FWL Sec. 30, T4N, R8E

5. LEASE DESIGNATION AND SERIAL NO.: Fee

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME: Anschtuz Ranch East

8. FARM OR LEASE NAME: W30-13

9. WELL NO.: W30-13

10. FIELD AND POOL, OR WILDCAT: Anschtuz Ranch East

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 25, T4N, R7E

12. COUNTY OR PARISH: Summit

13. STATE: Utah

14. PERMIT NO.:

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 7845' Graded ground

16. **Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF	[ ]	PULL OR ALTER CASING	[ ]
FRACTURE TREAT	[ ]	MULTIPLE COMPLETE	[ ]
SHOOT OR ACIDIZE	[ ]	ABANDON*	[ ]
REPAIR WELL	[ ]	CHANGE PLANS	[ ]
(Other)			[ ]

SUBSEQUENT REPORT OF:

WATER SHUT-OFF	[ ]	REPAIRING WELL	[ ]
FRACTURE TREATMENT	[ ]	ALTERING CASING	[ ]
SHOOTING OR ACIDIZING	[ ]	ABANDONMENT*	[ ]
(Other) Chg sfc. location			[X]

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Change surface location from original APD

As per attached plat the surface location should be
SE/4 SE/4, Sec. 25, 382' FEL & 597' FSL

RECEIVED
JUL 28 1986
DIVISION OF OIL, GAS & MINING

18. I hereby certify that the foregoing is true and correct

SIGNED Walter A. Shaffer TITLE District Drilling Supervisor DATE 7-24-86

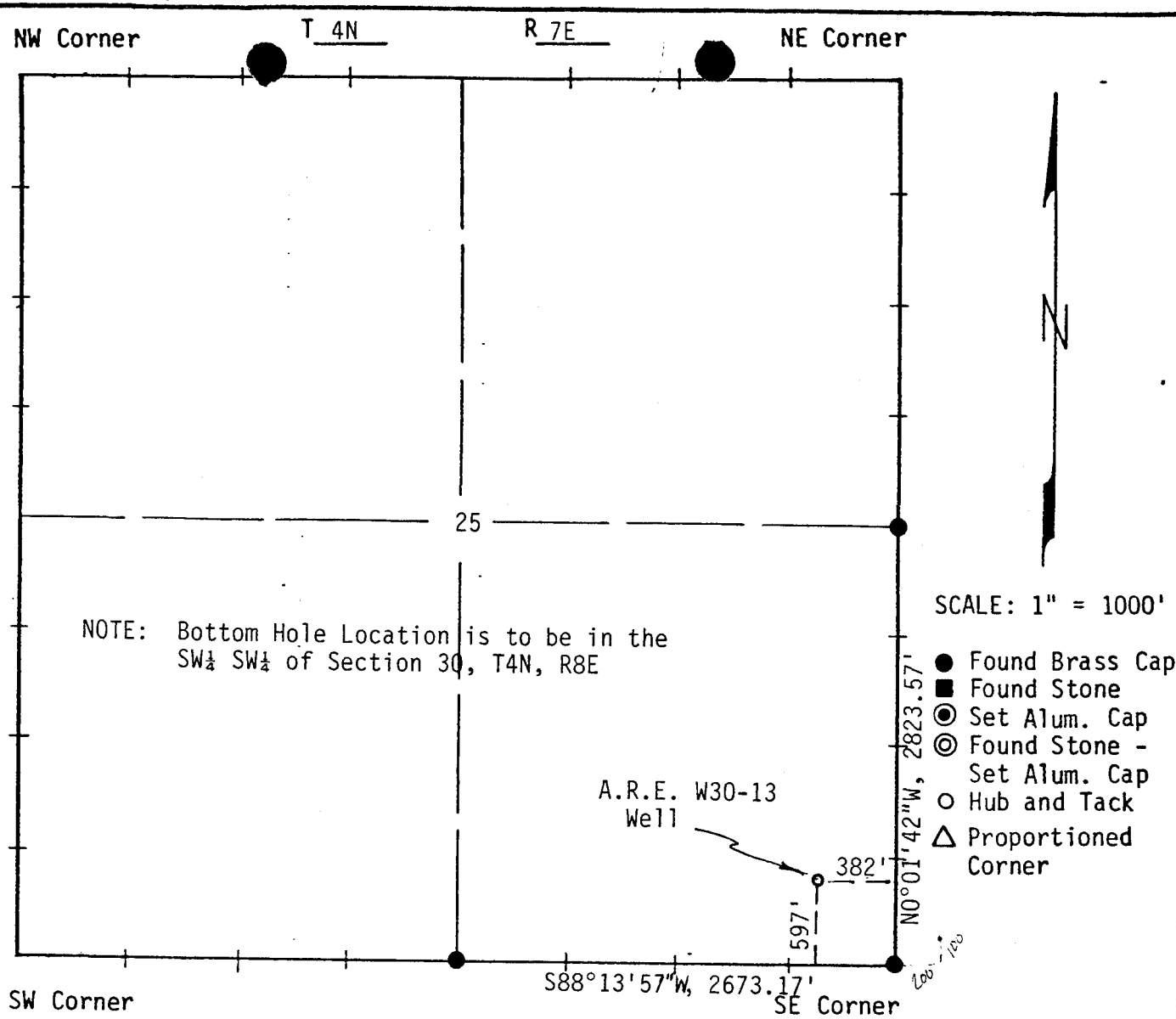
(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
DATE: 7-29-86
BY: John R. Baza

*See Instructions on Reverse Side



I, John A. Proffit of Evanston, Wyoming certify that in accordance with a request from Craig Griffith of Evanston, Wyoming for Amoco Production Co. I made a survey on the 10th day of July, 1986 for Location and Elevation of the A.R.E. W30-13 as shown on the above map, the wellsite is in the SE-1/4 SE-1/4 of Section 25, Township 4N, Range 7E of the SLB & M, Summit County, State of Utah, Elevation is 7848 Feet #5 Steel Rebar Datum 3 dimensional control net tied to USGS & GS Monuments (1929 NGVD)

Reference point

Reference point

Reference point

Reference point

RECEIVED
JUL 28 1986
DIVISION OF OIL, GAS & MINING

JOHN A. PROFFIT Registered 2860 Land Surveyor STATE OF UTAH

John A. Proffit 7/18/86
John A. Proffit, Utah R.L.S. NO. 2860

Revised 7/21/86 - Moved N & E
BOOK NO: 477
DATE: 7/18/86
JOB NO.: 86-10-26

UINTA ENGINEERING & SURVEYING, INC.
808 MAIN STREET, EVANSTON, WYOMING

Water Permit
21-1552
(T61916)

~~091700~~
091701

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

API # 43-043-30279

NAME OF COMPANY: AMOCO PRODUCTION

WELL NAME: ANSCHUTZ RANCH EAST W-30-13

SECTION SE SE 25 (SURF) (BHL 30) TOWNSHIP 4N (4N) RANGE 7E (8E) COUNTY Summit

DRILLING CONTRACTOR Bill Juniors

RIG #

SPUDDED: DATE 9-10-86

TIME 10:00 AM

HOW Dry Hole Digger

DRILLING WILL COMMENCE ~~Manning Rig 33~~ Approx. 9/15/86

REPORTED BY Ike Norwood

TELEPHONE # (307) 789-1700

DATE 9-11-86 SIGNED AS

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

102105

BLOW OUT PREVENTION TEST

NAME OF COMPANY: AMOCO

WELL NAME: ANSCHUTZ RANCH EAST W-30-13

SECTION: 25 TOWNSHIP 4N RANGE 7E COUNTY: Summit

DRILLING CONTRACTOR: Manning

RIG # 3

BOP TEST: DATE: 10-18-86

TIME: Approx. 11:00 PM

DRILLING:

CASING:

H_2S:

REPORTED BY: Ike Norwood

TELEPHONE NO.

DATE: 10-17-86 SIGNED AS

DOUBLE "D" ENTERPRISES

B.O.P. Test Report

103103

RECEIVED
OCT 2 [illegible]
DIV. OIL, GAS, MINING

B.O.P. TEST PERFORMED ON (DATE) Oct. 18, 1986

OIL CO.: Amoco

WELL NAME & NUMBER A.R.E. W 30-13

SECTION 30

TOWNSHIP 4-N

RANGE 8-E

COUNTY Summit, Utah

DRILLING CONTRACTOR Manning Drlg. #33

INVOICES BILLED FROM: **DOUBLE "D" ENTERPRISES, INC.**
213 Pine Street - Box 560
Shoshoni, Wyoming 82649
Phone: (307) 876-2308 or (307) 876-2234

TESTED BY: **DOUBLE "D" ENTERPRISES, INC.**
Box 2097
Evanston, Wyoming 82930
Phone: (307) 789-9213 or (307) 789-9214

OIL CO. SITE REPRESENTATIVE Ike

RIG TOOL PUSHER Roger

TESTED OUT OF Evanston, Wyo.

NOTIFIED PRIOR TO TEST:

COPIES OF THIS TEST REPORT SENT COPIES TO: Utah O&G.
Amoco
Amoco Site Rep.

ORIGINAL CHART & TEST REPORT ON FILE AT: Evanston, Wyo. OFFICE

DOUBLE "D" ENTERPRISES, INC.

P.O. Box 560
Shoshoni, Wyoming 82649
307-876-2308

DELIVERY TICKET
№ 4449

Date 10-18-86

Operator Amoco Contractor Manning Drlg. Rig No. #33

Ordered By Ike Lease A.R.E. Well No. W 30-13

County Summit, Ut. Section 30 Township 4-N Range 8-E

Items Tested:

	Low Test	Time Held	High Test	Time Held	Comments
Top Pipe Rams	—	—	3000	15 min.	O.K.
Bottom Pipe Rams	—	—	3000	15 min.	O.K.
Blind Rams	—	—	3000	15 min.	O.K.
Annualar B.O.P.	—	—	1500	15 min.	O.K.
Choke Manifold	—	—	3000	15 min.	O.K.
Choke Line	—	—	3000	15 min.	O.K.
Kill Line	—	—	3000	15 min.	O.K.
Super Choke	—	—	3000	15 min.	O.K. Had to Work & Flush
Upper Kelly	—	—	3000	15 min.	O.K. "Work" 2" Times"
Lower Kelly	—	—	3000	15 min.	O.K. "Work" 2" Times"
Floor Valve	—	—	3000	15 min.	O.K.
Dart Valve	—	—	3000	15 min.	O.K.

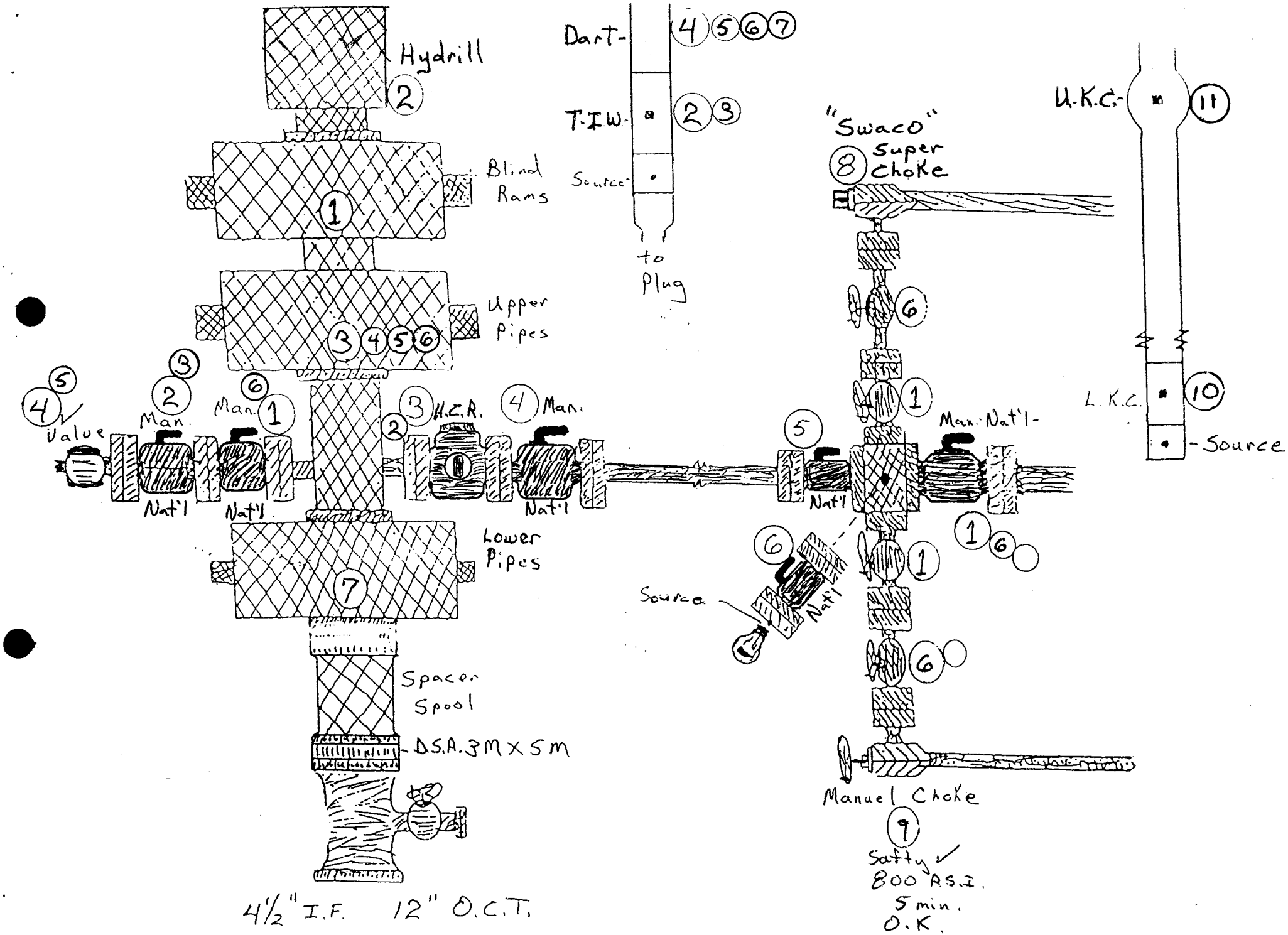
Manuel Choke 700 P.S.I. 5 min. Safty Check. O.K.

Closing Unit Psi 2850 Closing Time of Rams 6 sec. Closing Time of Hydril 13 sec.

Closed Casing Head Valve Yes Set Wear Sleeve Yes (Retriever on Location)

Comments Set All Valves, Fill Choke Line and Manifold W/ Methanol

Rates:


Hydrill
2
Blind Rams
1
Upper Pipes
3 4 5 6
Lower Pipes
7
Spacer Spool
D.S.A. 3M x 5M
4½" I.F. 12" O.C.T.
Valve
4 5
Man.
2 3
Man.
6 1
Nat'l
Nat'l
H.C.R.
3 2
Man.
4
Nat'l
Dart-
4 5 6 7
T.I.W.-
2 3
Source-
to Plug
"Swaco" Super Choke
8
6
1
Man.
Nat'l-
5
Nat'l
1 6
1
6
Source
Nat'l
6
Manuel Choke
9
Safty ✓
800 P.S.I.
5 min.
O.K.
U.K.C.-
11
L.K.C.
10
-Source

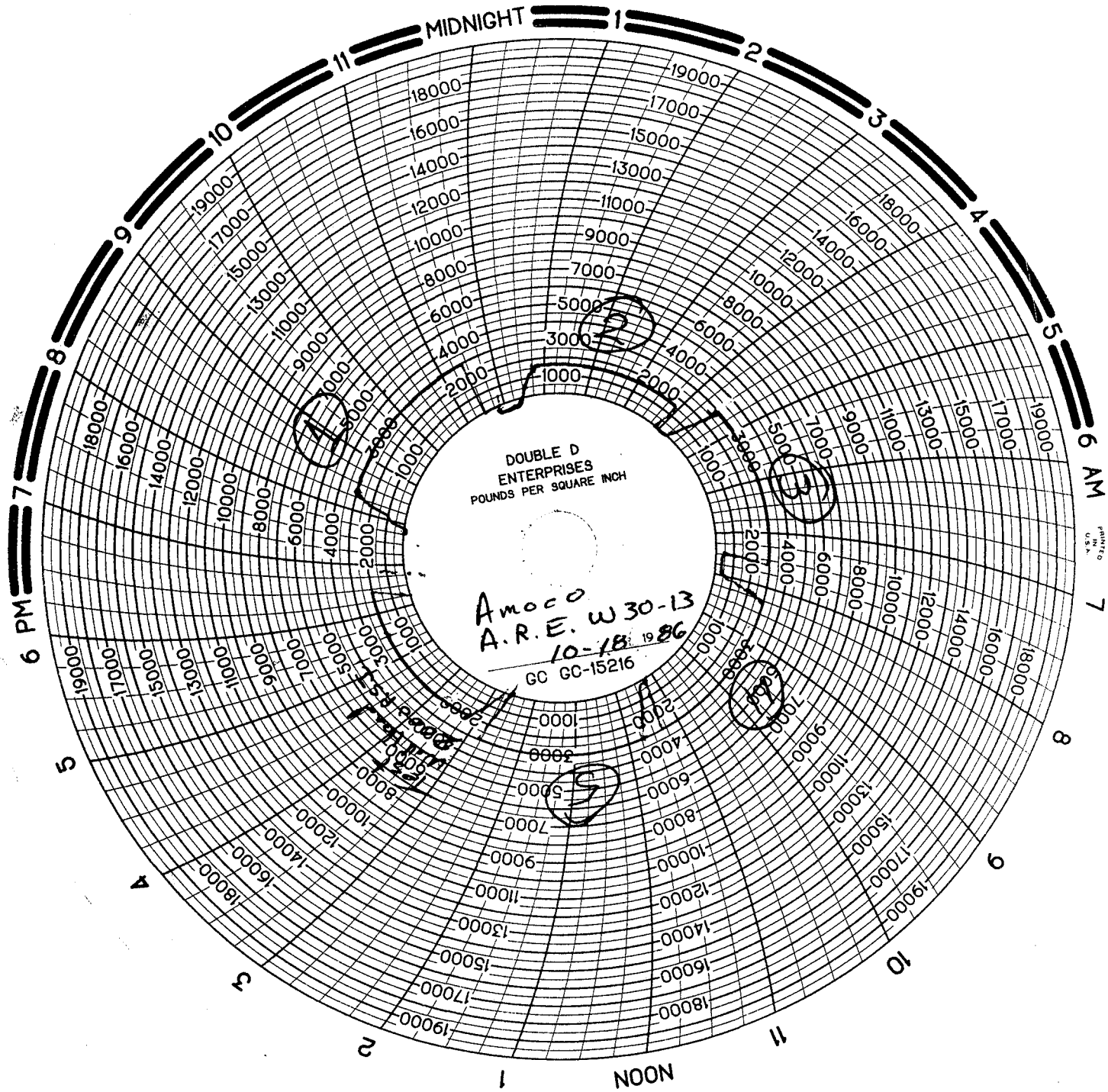
COMPANY	LEASE AND WELL NAME #	DATE OF TEST	RIG # AND NAME
Amoco	A.R.E. W 30-13	10-18-86	Manning #33

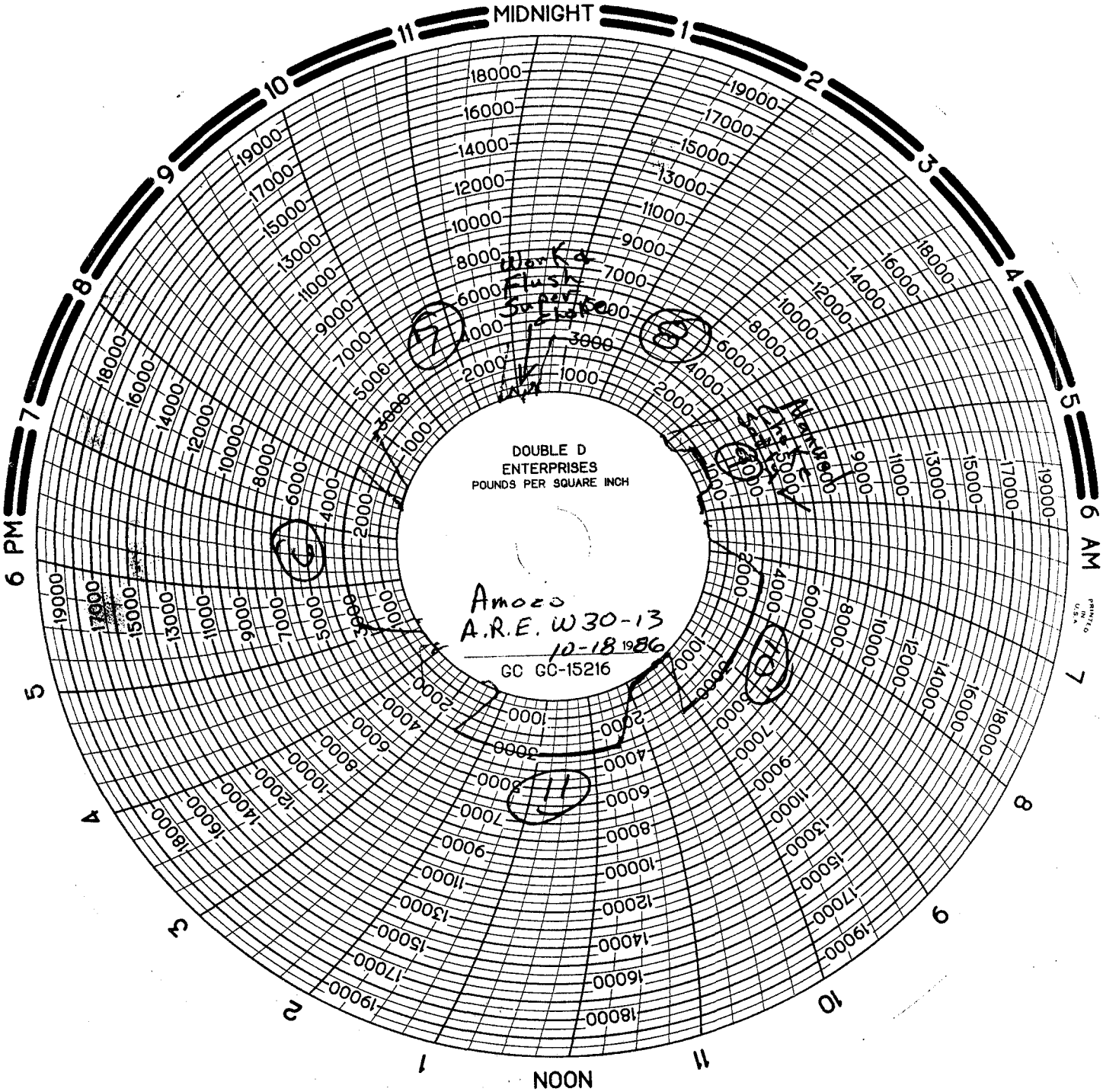
TEST#	TIME	
	5:15 — 5:30	Test Well Head to 2000 P.S.I. 15 Min. O.K. —
	—	Set Plug, Fill B.O.P's, Drop Die, Rig-to Test -
	— —	Blind Rams, While Rig Hooking up Koomey Lines
T	— —	Attempt Test, - No Go - Switch Koomey Lines - O.K.
1	1:20-1:35	3000 P.S.I. - Blind Rams, 1st Manuel Valve Kill line & Inside Valves on Choke Manifold
	— —	Pick-up & Make-up - Jt. D.P., Circ. Sub, T.I.W. Valve
	— —	Dart Valve, While Testing Blinds
	— —	Screw into Plug Work & Close Hydrill
	— —	Attempt Test #2. - Leaking at Hydrill Flange
	— —	Tighten Hydrill Flange - No Go - Break Hydrill
T	— —	Flange - ✓ Ring Grooves, C/O Ring Gasket, Retighten - O.K.
2	3:15-3:30	1500 P.S.I. - Hydrill, 2nd Man. Kill Line, & H.C.R. & T.I.W. Valve
T	— —	Switch to Upper Pipe Rams, open Hydrill
3	3:35-3:50	3000 P.S.I. - Upper Pipe Rams, 2nd Man. Kill line & H.C.R. & T.I.W. Valve
T	— —	Switch Valves
4	3:55-4:10	3000 P.S.I. - Upper Pipe Rams, ✓ Valve Kill Line, & Manuel Valve Choke Line, Dart Valve
T	— —	Switch Valves
5	4:15-4:30	3000 P.S.I. - Upper Pipe Rams, ✓ Valve, Manuel Valve Before Choke Manifold, Dart.
T	— —	Switch Valves
6	4:35-4:50	3000 P.S.I. - Upper Pipe Rams, 1st Manuel Valve Kill line & Outside Valves Choke Manifold w/ Riser Valve, Dart.
T	— —	Switch Pipe Rams
7	4:55-5:10	3000 P.S.I. - Lower Pipe Rams, & Dart Valve
	— —	While Rig hooking up Drip Pan's, Switch-Sources
	— —	to Finish Choke Manifold Test's
T	— —	Work, Flush, & Close Super Choke
8	5:20-5:35	3000 P.S.I. - Super Choke "Swaco"
		Switch Valves
T		
9	5:40-5:45	800 P.S.I - 5 min - Manuel Choke Safty Check O.K.
		Switch Sources F/ Kelly Tests

(Next Page)

COMPANY	LEASE AND WELL NAME #	DATE OF TEST	RIG # AND NAME
Amoco	A.R.E. W30-13	10-18-86	Manning # 33

TEST#	TIME	
	— —	Pull Test Plug, Drain B.O.P.'s, Kill Line,
	— —	Choke Line & Manifold
	— —	Set Wear Bushing, & Close Casing Head Valve
T	— —	Pick-up Kelly & Rig to Test - Same
10	6:20-6:35	3000 P.S.I. Lower Kelly Cock (Had to Work a Couple Times)
T	— —	Open L.K.C. & Fill Kelly to test U.K.C.
11	6:45-7:00	3000-P.S.I - Upper Kelly Cock (Work a couple Times)
	— —	Rig down F/ Kelly Tests & Break out Subs
	— —	Switch to Choke Manifold & Fill
	— —	With Methanol, Set all Values
	— —	Rig-down, Spool up lines & Load out
	— —	Make Out Tickets
	—	Travel to Shop
	—	Make Out Test Report


MIDNIGHT
1
2
3
4
5
6 AM
7
8
9
10
11
NOON
1
2
3
4
5
6 PM
7
8
9
10
11
DOUBLE D
ENTERPRISES
POUNDS PER SQUARE INCH
Amoco
A.R.E. W30-13
10-18 1986
GC GC-15216
PRINTED IN U.S.A.


MIDNIGHT
NOON
6 AM
6 PM
DOUBLE D
ENTERPRISES
POUNDS PER SQUARE INCH
Amoco
A.R.E. W30-13
10-18 1986
GC GC-15216
Work & Flush
Surface Lights
Hanwood
Lite Surface

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

112411

BLOW OUT PREVENTION TEST

NAME OF COMPANY: Amoco

WELL NAME: ARE W 30-13

SECTION: 30 TOWNSHIP 4N RANGE 8E COUNTY: Summit

DRILLING CONTRACTOR: R.L. Manning

RIG # 33

BOP TEST: DATE: 11/21/86

TIME: 12 a.m.

DRILLING:

CASING:

H_2S:

- Are @ 11,262'

REPORTED BY: Fritz Pederson

TELEPHONE NO. (307) 789-1344

DATE: 11/20/86 SIGNED 11/20/86

Form OGC-1b

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

120114

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL [ ] GAS WELL [XX] OTHER

2. NAME OF OPERATOR: AMOCO PRODUCTION COMPANY

3. ADDRESS OF OPERATOR: P. O. BOX 829, EVANSTON, WYOMING 82930

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface

SESE Sec. 25, 382' FEL & 597' FSL

100 FSL 2005 FWL SWSW
AND SE30
dlg.
43-043-30279

5. LEASE DESIGNATION AND SERIAL NO.: Fee

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME: Anschutz Ranch East

8. FARM OR LEASE NAME: W30-13

9. WELL NO.: W30-13

10. FIELD AND POOL, OR WILDCAT: Anschutz Ranch East

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 25, T4N, R7E

12. COUNTY OR PARISH: Summit

13. STATE: Utah

14. PERMIT NO.: 43-043-30279

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 7845' GR

16. **Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	[ ]	PULL OR ALTER CASING	[ ]	WATER SHUT-OFF	[ ]	REPAIRING WELL	[ ]
FRACTURE TREAT	[ ]	MULTIPLE COMPLETE	[ ]	FRACTURE TREATMENT	[ ]	ALTERING CASING	[ ]
SHOOT OR ACIDIZE	[ ]	ABANDON*	[ ]	SHOOTING OR ACIDIZING	[ ]	ABANDONMENT*	[ ]
REPAIR WELL	[ ]	CHANGE PLANS	[ ]	(Other) Report of Operations			[X]
(Other)			[ ]				

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

~~Spud Date:~~	~~9-22-86~~
Depth:	11,262'
Drilling Contractor:	Manning 33
Bit Size:	12.25 in
Total Depth:	14,650'
Drilling Ahead	

RECEIVED
NOV 24 1986
DIVISION OF
OIL, GAS & MINING

18. I hereby certify that the foregoing is true and correct

SIGNED Louis T. Lozzi TITLE Administrative Supervisor DATE 11-21-86

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Utah

DOUBLE "D" ENTERPRISES

B.O.P. Test Report

RECEIVED
NOV 26 1986
DIVISION OF
OIL, GAS & MINING

120138

B.O.P. TEST PERFORMED ON (DATE) November 21, 1986

OIL CO.: Amoco

WELL NAME & NUMBER A.R.E. W 30-13

SECTION ~~30~~ 25

TOWNSHIP 4N

RANGE ~~9E~~ 7E

COUNTY Summit

DRILLING CONTRACTOR Manning #33

INVOICES BILLED FROM: **DOUBLE "D" ENTERPRISES, INC.**
213 Pine Street - Box 560
Shoshoni, Wyoming 82649
Phone: (307) 876-2308 or (307) 876-2234

TESTED BY: **DOUBLE "D" ENTERPRISES, INC.**
Box 2097
Evanston, Wyoming 82930
Phone: (307) 789-9213 or (307) 789-9214

OIL CO. SITE REPRESENTATIVE Fritz Peterson

RIG TOOL PUSHER

TESTED OUT OF Evanston, Wyoming

NOTIFIED PRIOR TO TEST:

COPIES OF THIS TEST REPORT SENT COPIES TO: Site Representative
Utah Oil & Gas
B.L.M./Utah

ORIGINAL CHART & TEST REPORT ON FILE AT: Evanston OFFICE

DOUBLE "D" ENTERPRISES, INC.

P.O. Box 560
Shoshoni, Wyoming 82649
307-876-2308

DELIVERY TICKET
№ 4466

Date Nov 21/86

Operator Amoco Contractor Manning Rig No. 33

Ordered By Fritz Peterson Lease AR E Well No. W 30-43

County Summit Utah Section 30 Township 4-N Range 8-E

Items Tested:

	Low Test	Time Held	High Test	Time Held	Comments
Top Pipe Rams			3000	15 minutes	
Bottom Pipe Rams			3000	15	
Blind Rams			3000	15	
Annualar B.O.P.			1500	15	
Choke Manifold			3000	15	
Choke Line			3000	15	
Kill Line			3000	15	
Super Choke			3000	15	
Upper Kelly			3000	15	
Lower Kelly			3000	15	
Floor Valve			3000	15	
Dart Valve			3000	15	

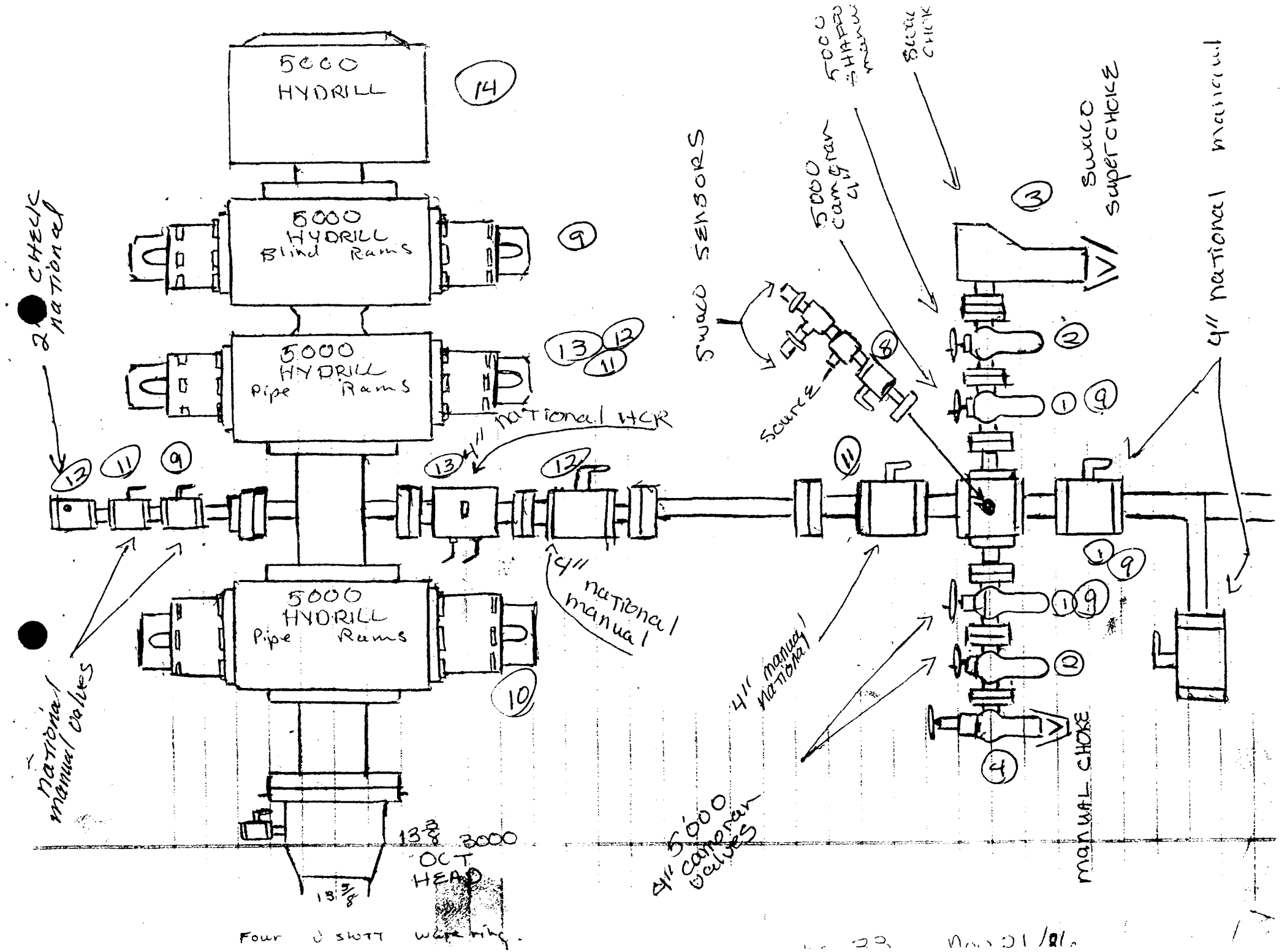
Closing Unit Psi 2850 Closing Time of Rams 6 sec Closing Time of Hydril 28 sec

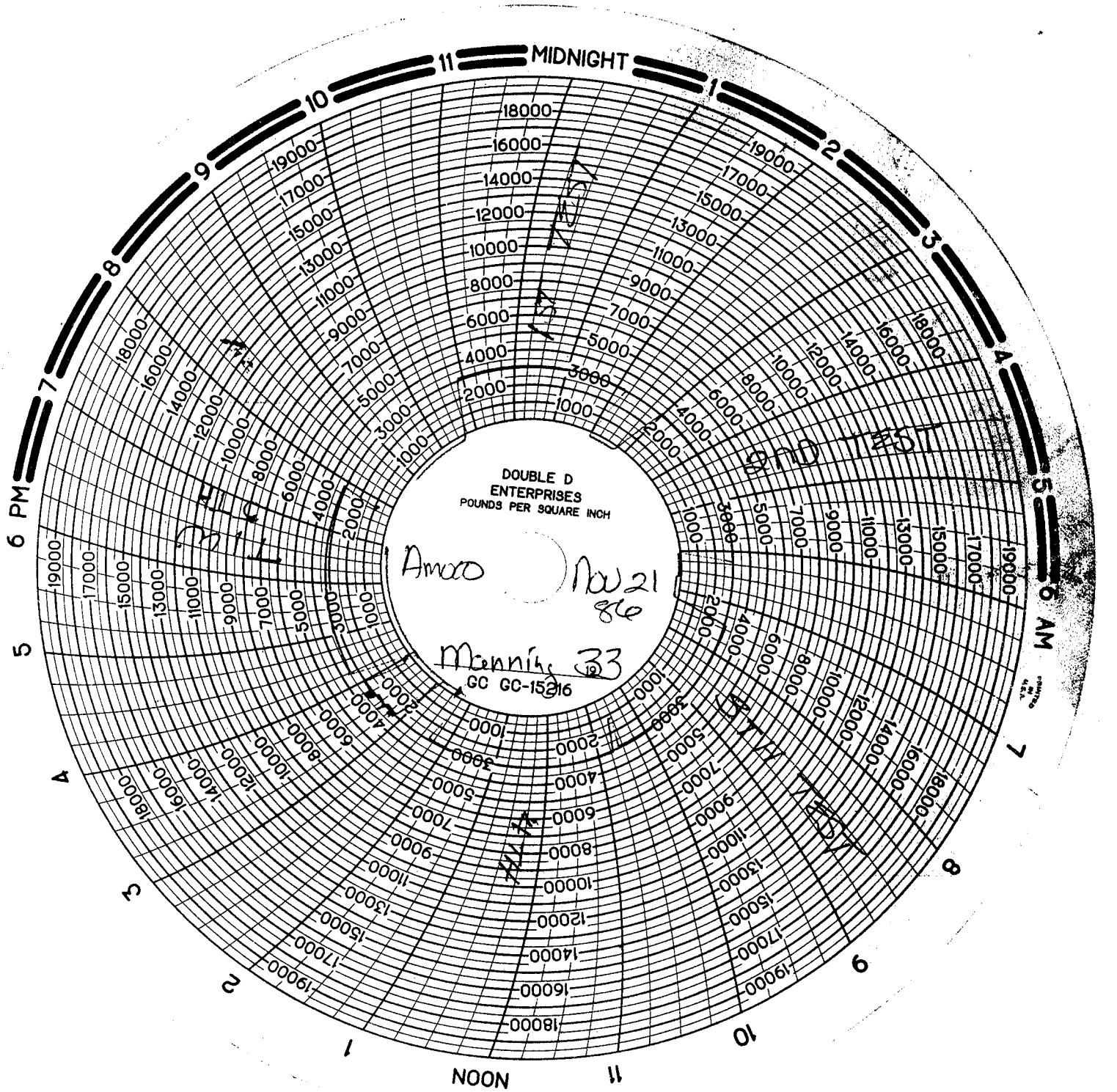
Closed Casing Head Valve yes Set Wear Sleeve yes

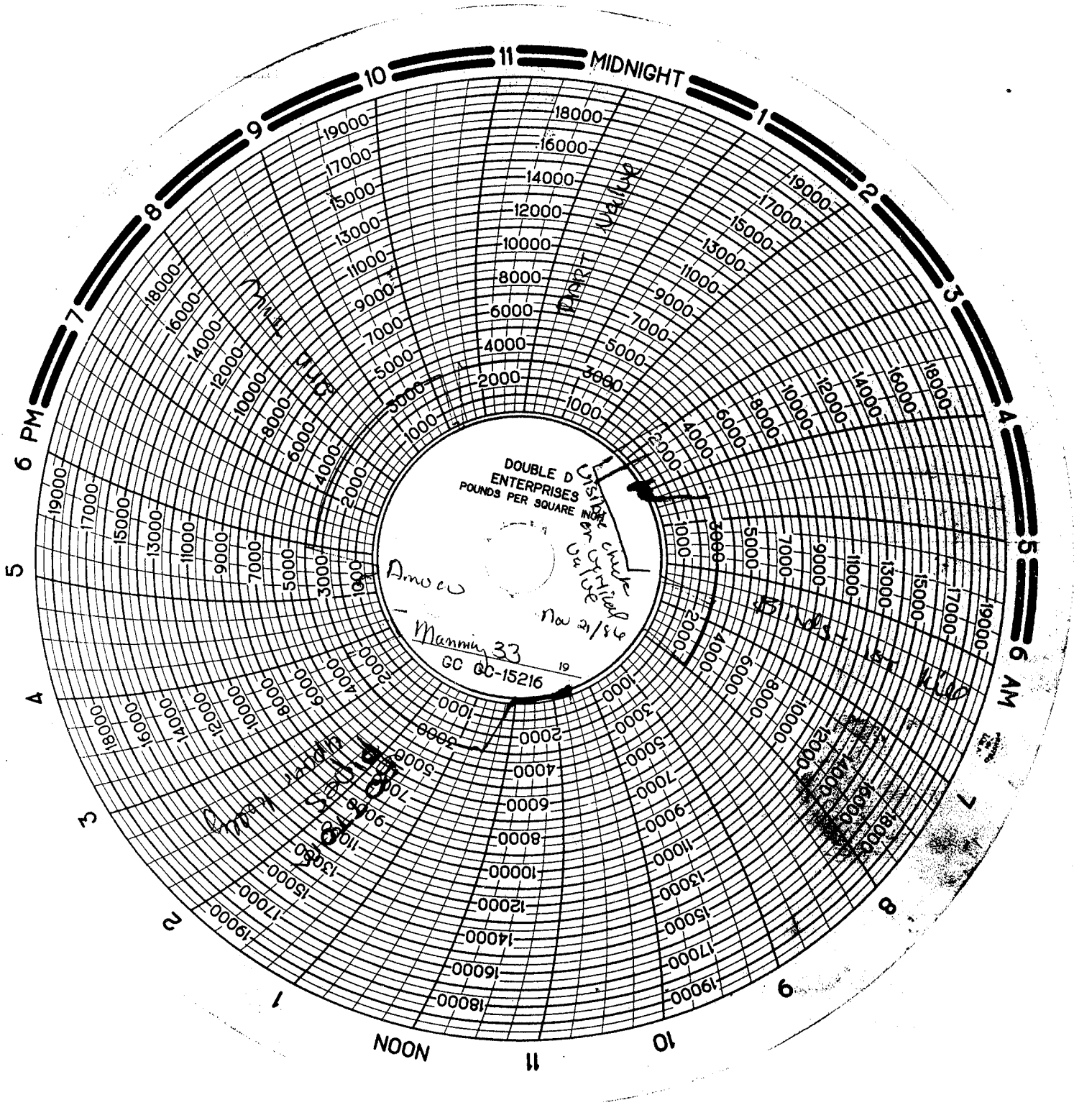
Comments

COMPANY	LEASE AND WELL NAME #	DATE OF TEST	RIG # AND NAME
Amoco	ARE W-30-13	Nov 21/86	Manning 33

TEST#	TIME	
	12:00	went to shop
	12:30	Left for location
	1:15 - 2:00	unloaded plug & subs Rig up on manofold.
1	2:05	1ST manofold valves
		sensor guages are 400# off on swaco
2	2:27	2ND manofold valves
3	2:50	3RD manofold valve (swaco)
4	3:05	4th manofold (manual choke)
		Rigg up floor valves
5	3:53	1st TIW valve
6	4:15	2ND TIW valve (Lower kelly)
7	4:36	3RD Floor valve (DART valve)
8	5:00	Pressure up on vertical valve & manofold - unplug hose to watch vertical valve - held 15 minutes visible check - no chart.
		Then break TIWs & DART.
	7:00	Made them pull wireline stuff rig up on Floor.
9	7:55	Blinds - 1ST kill - 1ST manofold
		Then kelly up.
10	8:30	Bottom pipes - upper kelly
11	8:55	Top pipes - 2no kill - value in front of manofold.
12	9:11	Top pipes - check valve - 4" manual next to HCR
13	9:30	Top pipes - HCR
14	9:50	Hydrill - 1500#
		Then set wave ring.
		Then Fill manofold with methanol
		Then caliber 9 3/8 Tusing head
		For next job.
	3:00	Finish Test Report and clean up.


5000 HYDRILL
14
5000 HYDRILL Blind Rams
9
5000 HYDRILL Pipe Rams
13
12
11
5000 HYDRILL Pipe Rams
10
2 CHECK national
12
11
9
national manual valves
4" national HCR
13
12
4" national manual
Swaco SENSORS
Source
8
5000 Cameron Clamp
5000 SHARP manual
Blind CHOK
11
4" manual national
5000 4" cameron valves
3
Swaco super CHOKE
2
1
9
1
9
1
9
2
4
manual CHOKE
4" national manual
13 3/8 3000 OCT HEAD
13 3/8
Four 0 SHOTT welding.


MIDNIGHT
NOON
6 AM
6 PM
DOUBLE D
ENTERPRISES
POUNDS PER SQUARE INCH
Amoco
Nov 21
86
Mennin 33
GC GC-15216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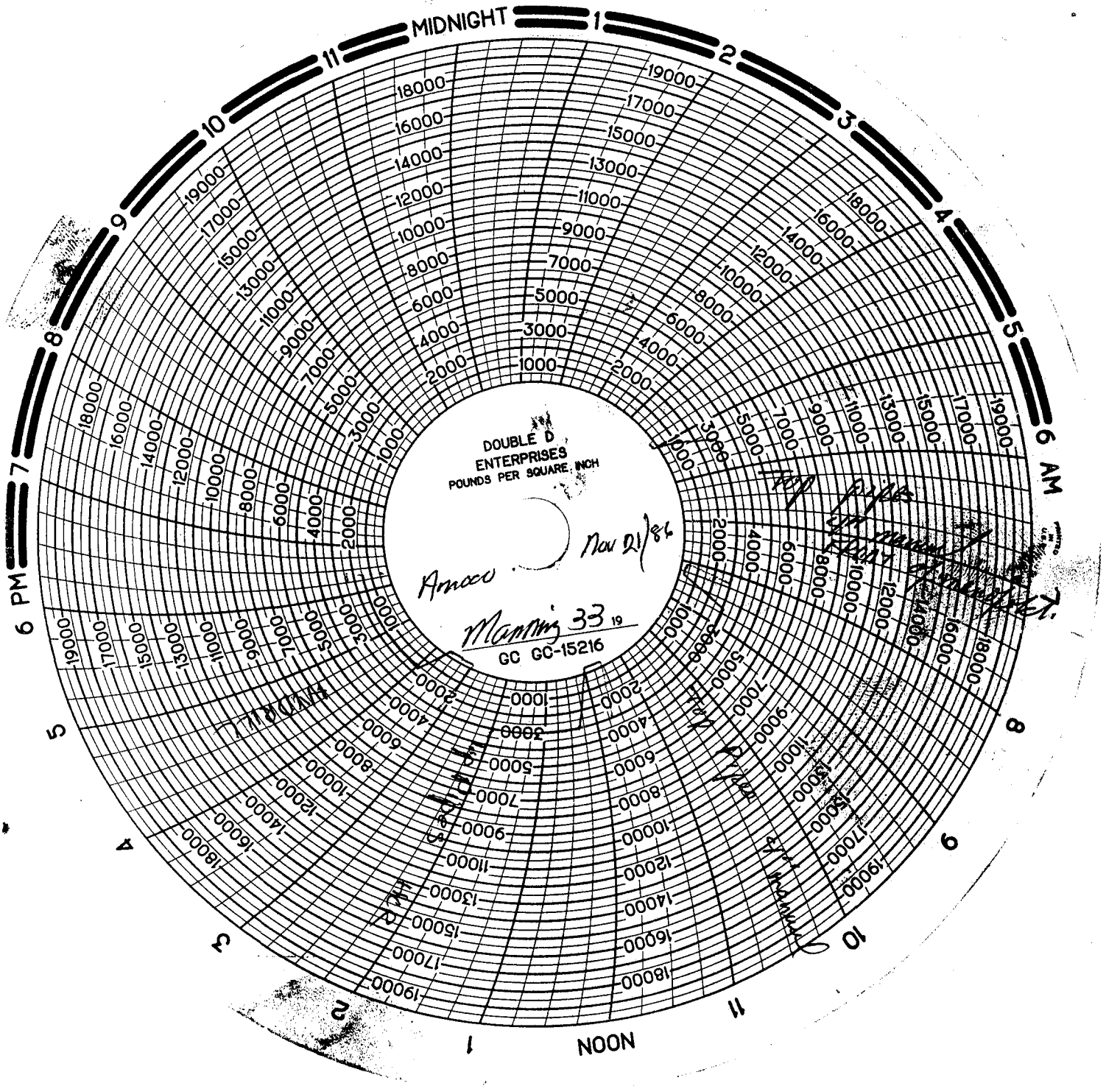
NOON
6 PM
6 AM
DOUBLE D
ENTERPRISES
POUNDS PER SQUARE INCH
Amoco
Manning 33
GC QC-15216
19


MIDNIGHT
6 AM
NOON
6 PM
DOUBLE D
ENTERPRISES
POUNDS PER SQUARE INCH
Amoco
Nov 21/86
Manning 33 19
GC GC-15216

Western Wyoming College Water Quality Laboratory

P.O. Box 428, 2500 College Drive, Rock Springs, WY 82901, Phone (307) 382-2121

Client: AMOCO PRODUCTION	Sample # (Assigned by Lab): 15721
Address: P.O. BOX 829, EVANSTON, WY 82930 ATTN: JON GREENER	
Source: RESERVE PIT WATER	Location:
Date/Time Collected:	Date/Time Received: 11/24/86

CATIONS

		Price	meq/l	mg/l
Sodium	(Na)	$3.50	17.90	410
Potassium	(K)	$3.50	1.05	41
Magnesium	(Mg)	$5.00	1.56	19
Calcium	(Ca)	$5.00	20.46	410
TOTAL			40.97	

ANIONS

		Price	meq/l	mg/l
Chloride	(Cl)	$4.00	33.85	1200
Fluoride	(F)	$4.00	0.02	0.31
Nitrate	(NO_3-N)	$5.00		
Sulfate	(SO_4)	$7.50	3.62	174
Carbonate	(CO_3)	$3.00		LT 0.1
Bicarbonate	(HCO_3)	$3.00	2.46	150
TOTAL			39.95	

TRACE ELEMENT ANALYSES

		PRICE	mg/l
Aluminum	(Al)	$10.00	
Arsenic	(As)	15.00	0.0082
Barium	(Ba)	10.00	LT 1.0
Beryllium	(Be)	10.00	
Cadmium	(Cd)	6.00	
Chromium	(Cr)	6.00	LT 0.05
Cobalt	(Co)	6.00	
Copper	(Cu)	6.00	
Iron	(Fe)	6.00	
Lead	(Pb)	6.00	
Lithium	(Li)	6.00	
Manganese	(Mn)	6.00	
Mercury	(Hg)	15.00	
Nickel	(Ni)	6.00	LT 0.10
Selenium	(Se)	15.00	LT 0.005
Silver	(Ag)	6.00	
Strontium	(Sr)	10.00	
Uranium	(U)	10.00	
Vanadium	(V)	10.00	
Zinc	(Zn)	6.00	LT 0.02

OTHER CONSTITUENTS

		PRICE	mg/l
pH	(SU)	$ 2.50	8.05
Conductivity	(umhos @ 25°C)	2.50	4200
Total Alkalinity	($CaCO_3$)	3.00	130
Hardness	($CaCO_3$)	2.50	1100
Total Dissolved Solids	(180°C)	3.50	2500
Suspended Solids	(103°C)	3.00	70.5
Total Solids	(103°C)	3.00	
Turbidity	(NTU)	4.00	
Ortho-Phosphate	(PO_4-P)	6.00	
Total Phosphate	(PO_4-P)	8.00	
Ammonia	(NH_3-N)	5.00	
Total Kjeldahl Nitrogen	(TKN-N)	12.00	
Sulfide	(S)	6.00	
Nitrite	(NO_2-N)	8.00	
Silica	(SiO_2)	10.00	
Cyanide	(CN)	10.00	
Boron	(B)	10.00	
Oil & Grease	(Freon Ext.)	18.00	
Chem. Oxygen Demand	(C.O.D.)	10.00	
Phenol		5.00	
Residual Chlorine	(Cl_2)	2.50	
Dissolved Oxygen	(O_2)	3.00	
B.O.D.	(5 day @ 20°C)	7.00	
Fecal Coliform	(per 100 ml-MF)	5.00	
Total Coliform	(per 100 ml-MF)	5.00	

Charge: 113.50 + 75.00 PSF	Date Completed: 12/3/86

Dlg

122418

Amoco Production Company

December 10, 1986

RECEIVED
DEC 15 1986
DIVISION OF
OIL, GAS & MINING

Utah Division of Oil, Gas & Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180

Re: Anschutz Ranch East W30-13 Well

Attn: Dianne Nielson

Dear Ms. Nielson:

Please find enclosed Amoco Production Companys proposal to pump and dispose of reserve pit fluid downhole for the above referenced well, located in Sec. 25, T4N, R7E.

If there are any questions regarding the attached information please call Walter Shaffer with Amoco Production Company at (307) 789-1700 ext. 2388.

Thank you,

Walter Shaffer

Walter G. Shaffer
District Drilling Supervisor

/kg

Encl.

Form OGC-1b

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

RECEIVED DEC 15 1986 DIVISION OF OIL, GAS & MINING

1. OIL WELL [ ] GAS WELL [X] OTHER

2. NAME OF OPERATOR: AMOCO PRODUCTION COMPANY

3. ADDRESS OF OPERATOR: P. O. BOX 829, EVANSTON, WYOMING 82930

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface

SE/4 SE/4 100' FSL & 450'FEL Section 25

BHL 100' FSL & 200' FWL Section 30, T4N, R8E

5. LEASE DESIGNATION AND SERIAL NO.: Fee

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME: Anschtuz Ranch East

8. FARM OR LEASE NAME: W30-13

9. WELL NO.: W30-13

10. FIELD AND POOL, OR WILDCAT: Anschutz Ranch East

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 25, T4N, R7E

12. COUNTY OR PARISH: Summit

13. STATE: Utah

14. PERMIT NO.: 43-043-30279

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 7845' GR

16. **Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	[ ]	PULL OR ALTER CASING	[ ]	WATER SHUT-OFF	[ ]	REPAIRING WELL	[ ]
FRACTURE TREAT	[ ]	MULTIPLE COMPLETE	[ ]	FRACTURE TREATMENT	[ ]	ALTERING CASING	[ ]
SHOOT OR ACIDIZE	[ ]	ABANDON*	[ ]	SHOOTING OR ACIDIZING	[ ]	ABANDONMENT*	[ ]
REPAIR WELL	[ ]	CHANGE PLANS	[ ]	(Other)			[ ]
(Other)			[ ]	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Propose to pump and dispose of reserve pit fluid downhole
Between 13 3/8" and 9 5/8" casing annulus

Casing Tests: 13 3/8" casing to 2000 psi - OK
9 5/8" casing to 1500 psi - to be performed

Maximum displacement pressure will not exceed the Braden Head pressure limit of 3000 psi surface pressure.

Estimated volume of disposal = 15,000 bbls

Attachments: Casing and Cementing Diagram
Composite Reserve Pit Fluid Analysis

Estimated date of operation 12/20/86 - 1/15/87

18. I hereby certify that the foregoing is true and correct

SIGNED Walter G. Shaffer TITLE Dist. Drilling Foreman DATE 12/10/86

(This space for Federal or State office use)

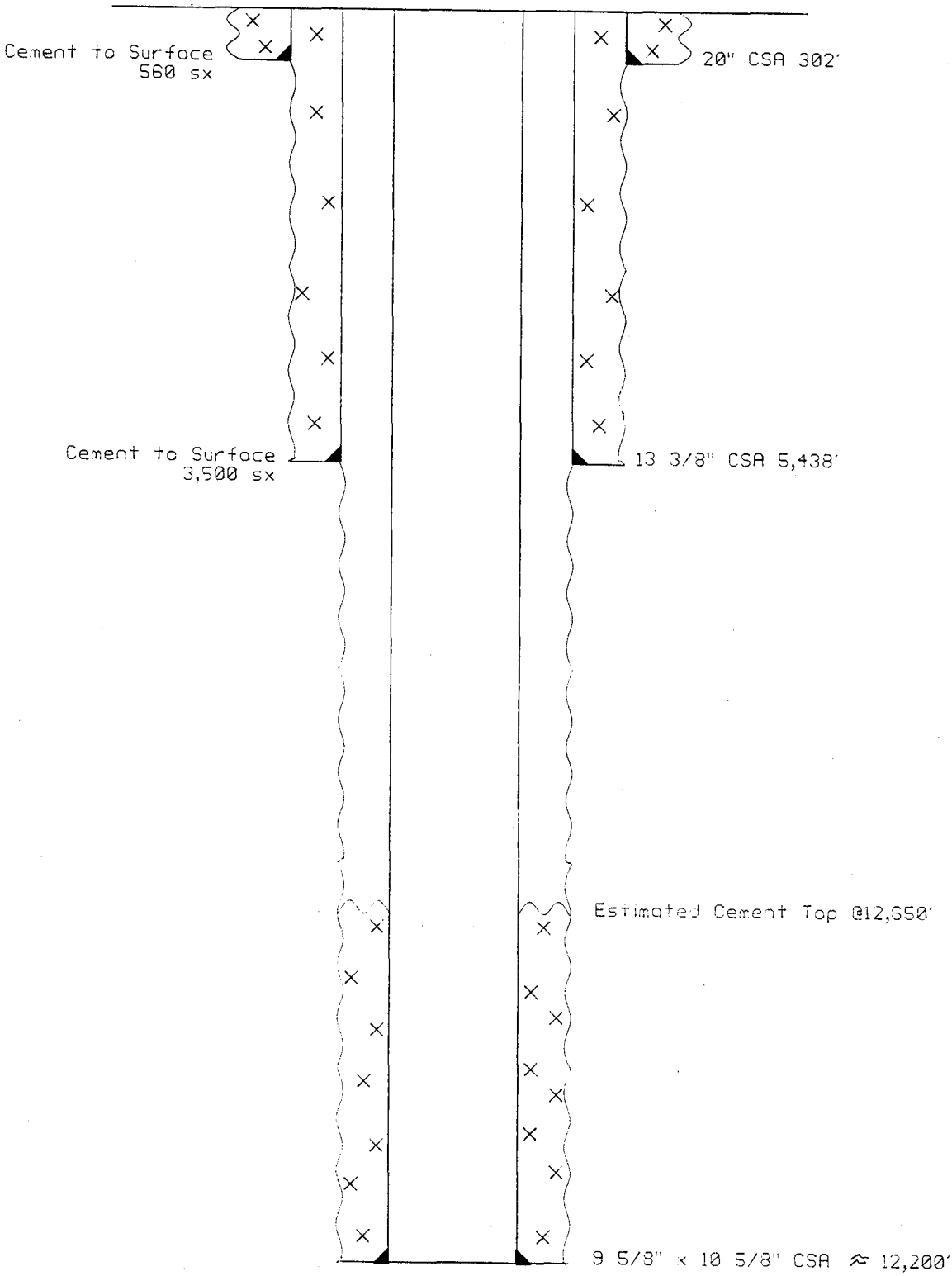
APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
DATE: 12-22-86
BY: John R. Baza

*See Instructions on Reverse Side

ARE W30-13
Wellbore Diagram



Form OGC-1b

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

121908

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL [ ] GAS WELL [XX] OTHER

2. NAME OF OPERATOR: AMOCO PRODUCTION COMPANY

3. ADDRESS OF OPERATOR: P. O. BOX 829, EVANSTON, WYOMING 82930

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: SESE Sec. 25, 382' FEL & 597' FSL

5. LEASE DESIGNATION AND SERIAL NO.: Fee

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME: Anschutz Ranch East

8. FARM OR LEASE NAME: W30-13

9. WELL NO.: W30-13

10. FIELD AND POOL, OR WILDCAT: Anschutz Ranch East

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 25, T4N, R7E

12. COUNTY OR PARISH: Summit

13. STATE: Utah

14. PERMIT NO.: 43-043-30279

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 7845' GR

16. **Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	[ ]	PULL OR ALTER CASING	[ ]	WATER SHUT-OFF	[ ]	REPAIRING WELL	[ ]
FRACTURE TREAT	[ ]	MULTIPLE COMPLETE	[ ]	FRACTURE TREATMENT	[ ]	ALTERING CASING	[ ]
SHOOT OR ACIDIZE	[ ]	ABANDON*	[ ]	SHOOTING OR ACIDIZING	[ ]	ABANDONMENT*	[ ]
REPAIR WELL	[ ]	CHANGE PLANS	[ ]	(Other) Report of Operations			[ ]
(Other)			[ ]	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Spud Date:	9-22-86
Depth:	11,911'
Drilling Contractor	Manning 33
Bit Size:	12.25 in
Total Depth:	14,650'

RECEIVED
DEC 18 1986
DIVISION OF
OIL, GAS & MINING

Drilling Ahead

18. I hereby certify that the foregoing is true and correct

SIGNED [signature] TITLE Administrative Supervisor DATE 12-16-86

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Wah

012034

DOUBLE "D" ENTERPRISES

B.O.P. Test Report

RECEIVED
JAN 12 1987
DIVISION OF
OIL, GAS & MINING

B.O.P. TEST PERFORMED ON (DATE) January 5, 1987

OIL CO.: Amoco

WELL NAME & NUMBER A.R.E. W-30-13 43-043-30279

SECTION 30

TOWNSHIP 4N

RANGE 8E

COUNTY Summit

DRILLING CONTRACTOR Manning #33

INVOICES BILLED FROM: **DOUBLE "D" ENTERPRISES, INC.**
213 Pine Street - Box 560
Shoshoni, Wyoming 82649
Phone: (307) 876-2308 or (307) 876-2234

TESTED BY: **DOUBLE "D" ENTERPRISES, INC.**
Box 2097
Evanston, Wyoming 82930
Phone: (307) 789-9213 or (307) 789-9214

OIL CO. SITE REPRESENTATIVE Fritz Peterson

RIG TOOL PUSHER

TESTED OUT OF Evanston, Wyoming

NOTIFIED PRIOR TO TEST:

COPIES OF THIS TEST REPORT SENT COPIES TO: Site Representative
Utah Oil & Gas
B.L.M./Utah

ORIGINAL CHART & TEST REPORT ON FILE AT: Double D. Evanston, Wyoming OFFICE

DOUBLE "D" ENTERPRISES, INC.

P.O. Box 560
Shoshoni, Wyoming 82649
307-876-2308

DELIVERY TICKET
№ 4470

Date 1-5-87
Operator Amoco Prod. Co Contractor Manning Rig No. 39
Ordered By Fritz Pederson Lease A.R.E. Well No. W-30-13
County Summit Section 30 Township 4N Range 8E

Items Tested:

	Low Test	Time Held	High Test	Time Held	Comments
Top Pipe Rams			5000	15-min.	
Bottom Pipe Rams			5000	15-Min.	
Blind Rams			5000	15-min.	
Annualar B.O.P.			2500	15-min.	
Choke Manifold			5000	15-min.	
Choke Line			5000	15-min.	
Kill Line			5000	15-min.	
Super Choke			5000	15-min.	
Upper Kelly			5000	15-min.	
Lower Kelly			5000	15-min.	
Hook Valve			5000	15-min	
Dart Valve			5000	15-min.	

Closing Unit Psi 2800 Closing Time of Rams 8 sec Closing Time of Hydril 18 sec
Closed Casing Head Valve yes Set Wear Sleeve NO
Comments

7:30 - 7:45 (1) Test Blind Rams - Inside Manual on kill line - 1st valves - manifold

7:40 - 8:25 (2) Test Lower Pipe Rams - 1st TIW valve

8:35 - 8:50 (3) Test Top Pipe Rams 2nd manual on kill line - Manual on choke line and TIW valve.

8:55 - 9:10 (4) Test Top Pipe Rams - Check valve on kill line - 2nd manual on choke line - 2nd TIW valve

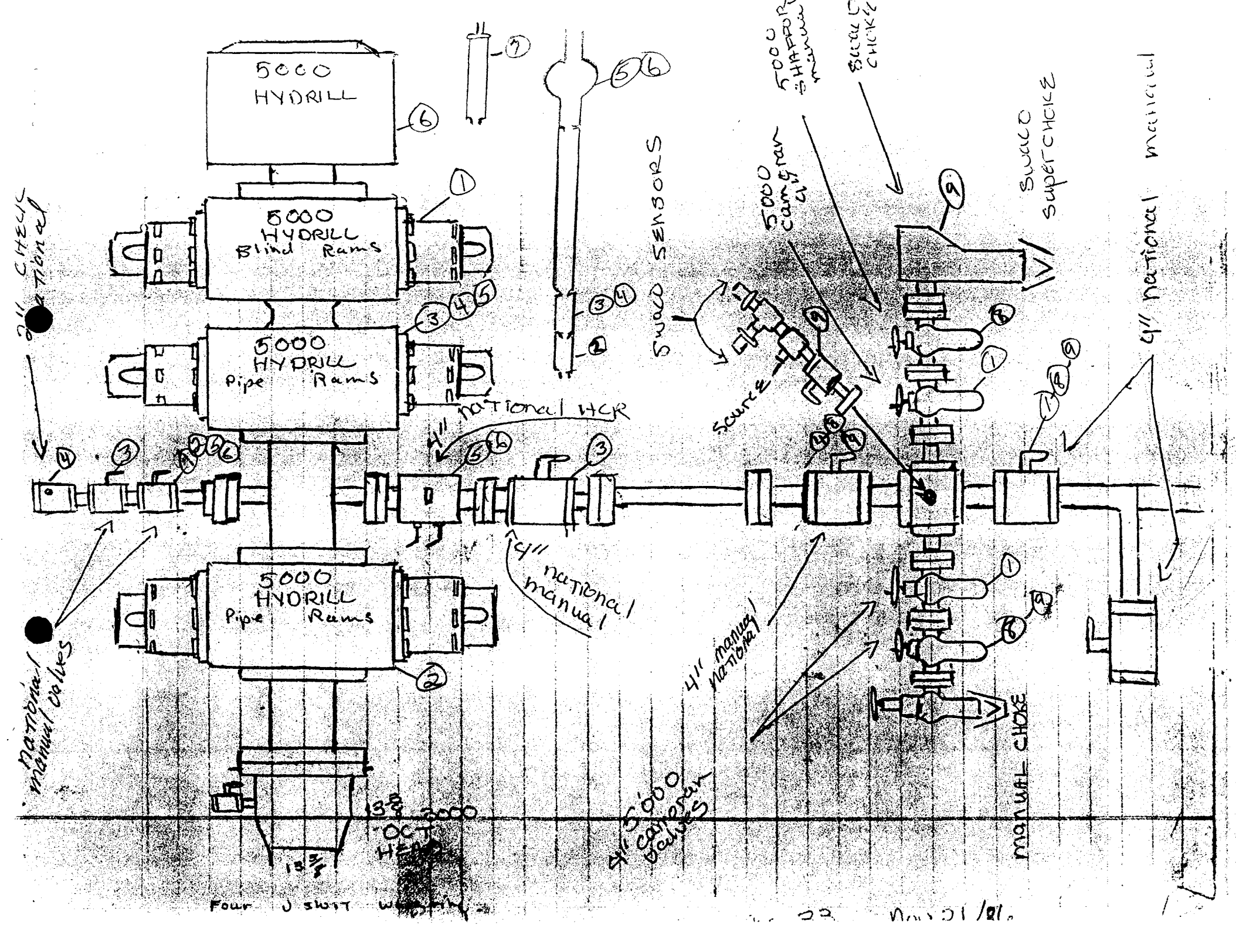
9:25 - 9:40 (5) Test Top Pipe Rams - Inside manual on kill line - HCR on Choke line Upper Kelly cock valve.

9:45 - 10:00 (6) Test Annular - Inside manual on kill line - HCR on choke line Upper Kelly cock valve

10:15 - 10:30 (7) Test Dart valve

10:35 - 10:50 (8) Test 2nd valves in manifold.

10:55 - 11:05 (9) Test Super choke - held w/ chart 10-min. - closed vertical valve - visual checked for 5-min.


5000 HYDRILL
5000 HYDRILL Blind Rams
5000 HYDRILL Pipe Rams
5000 HYDRILL Pipe Rams
2" CHECK National
National manual valves
National HCR
4" National manual
4" manual National
4" 5000 cameron valves
5000 SHAFFER minimum
5000 cameron cylinder
Swaco sensors
source
Swaco choke
Swaco superchoke
manual choke
4" National manual
13 3/8 5000 OCT HEAD
13 3/8
Four J slot

DOUBLE-D-ENTERPRISES
TESTED BY
EVANSTON
789-9213
SHOSHONI
876-2308
TESTED FOR
LEASE & #
TEST DATE
GC GO-15271
PRINTED IN U.S.A.

012034

DOUBLE "D" ENTERPRISES

B.O.P. Test Report

RECEIVED JAN 12 1987

DIVISION OF OIL, GAS & MINING

B.O.P. TEST PERFORMED ON (DATE) January 5, 1987

OIL CO.: Amoco

WELL NAME & NUMBER A.R.E. W-30-13 43-043-30575

SECTION 30

TOWNSHIP 4N

RANGE 8E

COUNTY Summit

DRILLING CONTRACTOR Manning #33

INVOICES BILLED FROM: **DOUBLE "D" ENTERPRISES, INC.**
213 Pine Street - Box 560
Shoshoni, Wyoming 82649
Phone: (307) 876-2308 or (307) 876-2234

TESTED BY: **DOUBLE "D" ENTERPRISES, INC.**
Box 2097
Evanston, Wyoming 82930
Phone: (307) 789-9213 or (307) 789-9214

OIL CO. SITE REPRESENTATIVE Fritz Peterson

RIG TOOL PUSHER

TESTED OUT OF Evanston, Wyoming

NOTIFIED PRIOR TO TEST:

COPIES OF THIS TEST REPORT SENT COPIES TO: Site Representative
Utah Oil & Gas
B.L.M./Utah

ORIGINAL CHART & TEST REPORT ON FILE AT: Double D. Evanston, Wyoming OFFICE

DOUBLE "D" ENTERPRISES, INC.

P.O. Box 560
Shoshoni, Wyoming 82649
307-876-2308

DELIVERY TICKET
№ 4470

Date 1-5-87
Operator Amoco Prod. Co Contractor Manning Rig No. 33
Ordered By Fritz Pederson Lease A.R.E. Well No. W-30-13
County Summit Section 30 Township 4N Range 8E

Items Tested:

	Low Test	Time Held	High Test	Time Held	Comments
Top Pipe Rams			5000	15-min.	
Bottom Pipe Rams			5000	15-Min.	
Blind Rams			5000	15-min.	
Annualar B.O.P.			2500	15-min.	
Choke Manifold			5000	15-min.	
Choke Line			5000	15-min.	
Kill Line			5000	15-min.	
Super Choke			5000	15-min.	
Upper Kelly			5000	15-min.	
Lower Kelly			5000	15-min.	
Floor Valve			5000	15-min.	
Dart Valve			5000	15-min.	

Closing Unit Psi 2800 Closing Time of Rams 8 sec Closing Time of Hydril 18 sec
Closed Casing Head Valve yes Set Wear Sleeve No
Comments

7:30 - 7:45 (1) Test Blind Rams - Inside Manual on kill line - 1st valves - manifold

7:10 - 8:25 (2) Test Lower Pipe Rams - 1st TIW value

7:35 - 8:50 (3) Test Top Pipe Rams 2nd manual on kill line - Manual on choke line 2nd TIW value.

7:55 - 9:10 (4) Test Top Pipe Rams - Check value on kill line - 2nd manual on choke line - 2nd TIW value

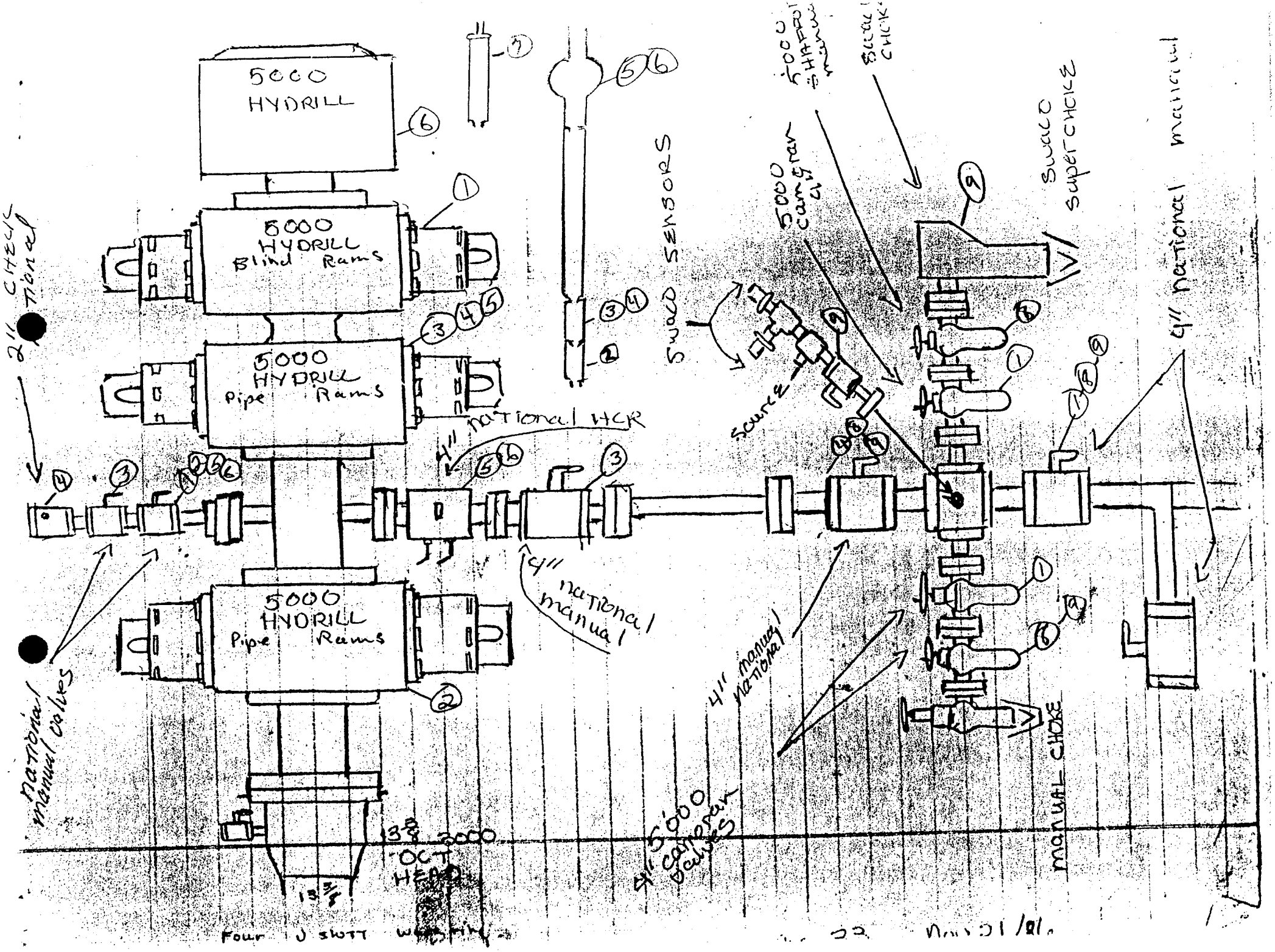
7:25 - 9:40 (5) Test Top Pipe Rams - Inside manual on kill line - HCR on choke line upper kelly cock value.

7:45 - 10:00 (6) Test Annular - Inside manual on kill line - HCR on choke line Upper kelly cock value

10:15 - 10:30 (7) Test Dart value

10:35 - 10:50 (8) Test 2nd values in manifold.

10:55 - 11:05 (9) Test Super choke - held w/ chart 10-min. - closed vertical value - visual checked for 5-min.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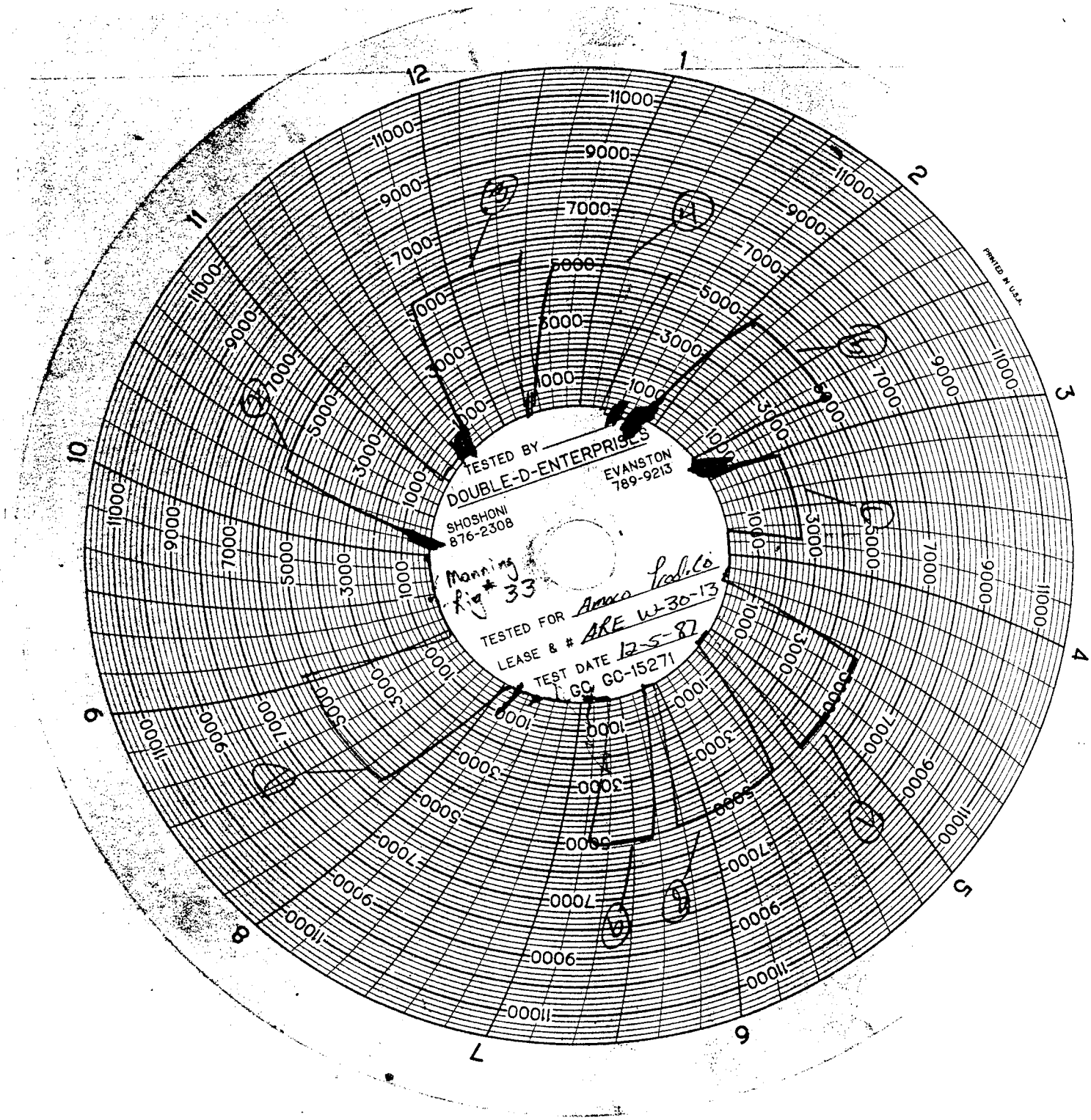
5000 HYDRILL Blind Rams
5000 HYDRILL Pipe Rams
5000 HYDRILL Pipe Rams
2" check national
manual/manual valves
4" national HCR
4" national manual
4" manual/national
5000 Shaffer annular
5000 cameron gate
Swaco sensors
source
Swaco choke
Swaco superchoke
4" national
manual choke
13 3/8 3000 OCT HEAD
13 3/8
Four 1 3 SWTT


TESTED BY
DOUBLE-D-ENTERPRISES
EVANSTON
789-9213
SHOSHONI
876-2308
Manning
fig # 33
TESTED FOR Amoco Prod. Co
LEASE & # ARE W-30-13
TEST DATE 12-5-87
GC GC-15271
PRINTED IN U.S.A.

Form OGC-1b

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

012807

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL [ ] GAS WELL [XX] OTHER

2. NAME OF OPERATOR: AMOCO PRODUCTION COMPANY

3. ADDRESS OF OPERATOR: P. O. BOX 890, EVANSTON, WYOMING 82930

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: SESE Sec. 25, 382' FEL & 597' FSL

5. LEASE DESIGNATION AND SERIAL NO.:

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Fee

7. UNIT AGREEMENT NAME: Asrchutz Ranch East

8. FARM OR LEASE NAME: W30-13

9. WELL NO.: W30-13

10. FIELD AND POOL, OR WILDCAT: Anschutz Ranch East

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: BHL Sec. 30 T.4N R.8E; SURF. Sec. 25, T4N, R7E

14. PERMIT NO.: 43-043-30279

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 7845' GR

12. COUNTY OR PARISH: Summit

13. STATE: Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	[ ]	PULL OR ALTER CASING	[ ]	WATER SHUT-OFF	[ ]	REPAIRING WELL	[ ]
FRACTURE TREAT	[ ]	MULTIPLE COMPLETE	[ ]	FRACTURE TREATMENT	[ ]	ALTERING CASING	[ ]
SHOOT OR ACIDIZE	[ ]	ABANDON*	[ ]	SHOOTING OR ACIDIZING	[ ]	ABANDONMENT*	[ ]
REPAIR WELL	[ ]	CHANGE PLANS	[ ]	(Other) Report of operations			[ ]
(Other)			[ ]				

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

✓ Spud Date: 9-22-86

Depth: 14,635'

Drilling Contractor: Manning 33

Bit Size: 8.5 in

Total Depth: 14,650'

Drilling Ahead

RECEIVED
JAN 26 1987
DIVISION OF
OIL, GAS & MINING

18. I hereby certify that the foregoing is true and correct

SIGNED Louis F. Lozzie TITLE Administrative Supervisor DATE 1-23-87

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Form OGC-3

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUBMIT IN DUPLICATE*
(See other instructions on reverse side)

030417 56 64 01 16

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL XX DRY ☐ Other

b. TYPE OF COMPLETION: NEW WELL XX WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other

RECEIVED MAR 02 1987 DIVISION OF OIL, GAS & MINING

2. NAME OF OPERATOR: AMOCO PRODUCTION COMPANY

3. ADDRESS OF OPERATOR: P. O. BOX 829, EVANSTON, WYOMING 82930

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface: 597' FSL & 381' FEL Sec. 25, T4N, R7E
At top prod. interval reported below: 66' FSL & 185' FWL, Sec. 30, T4N, R8E
At total depth: 162' FNL & 470' FWL Sec. 31, T4N, R8E

5. LEASE DESIGNATION AND SERIAL NO.: Fee
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT AGREEMENT NAME: Anschutz Ranch East
8. FARM OR LEASE NAME: W30-13
9. WELL NO.: W30-13
10. FIELD AND POOL, OR WILDCAT: Nugget
11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec. 25, T4N, R7E
12. COUNTY OR PARISH: Summit
13. STATE: Utah

PERMIT NO.: 43-043-30279 DATE ISSUED: 7-23-86

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (Ready to prod.)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
9-10-86	1-18-87	2-12-87	7845' GL/7868' KB	7843'

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
14635'MD/14387'TVD	14520'MD/14288'TVD		→	X	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
Top: 13,938' MD/13,793' TVD; Bottom: 14,635' MD/ 14,387' TVD; Nugget (TD)

25. WAS DIRECTIONAL SURVEY MADE: Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN
Spectral Density, Dual Induction, Cement Bond Log, Directional Dipmeter

27. WAS WELL CORED: No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
20"	94#	302'	26"	560 sx Class "A" to sfc	
13 3/8"	61-72#	5438'	17 1/2"	3000 sx Class A 50/50 poz/500 sx H/	
9 5/8x10 5/8"	47-101.4#	12248'	12 1/4"	935 sx Class H	(200 sx A)
7"	26-32#	14635'	8 1/2"	186 sx Class A/300 sx Class H	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
3 1/2"		13,646'

31. PERFORATION RECORD (Interval, size and number)
13953'-13972'
14002'-14100'
14180'-14280'
14296'-14320'
14354'-14406'
14452'-14468'
14474'-14496'
All 4SPF

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)
2-15-87	Flowing	Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
2-15-87	20	90½/64ths	→	3458	8,333	0	2410 SCF/bbl

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
1750	0	→	4150	10,000	0	46.0

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)
Reinjected as part of a pressure maintenance project

TEST WITNESSED BY

35. LIST OF ATTACHMENTS

870309

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED [signature] TITLE Stf Fac Eng Supervisor DATE 2-26-87

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.
If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.
Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.
Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.
Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.
Item 29: *"Sacks Cement":* Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.
Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

No Cores
No DST's

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Nugget	13,938	14,635 (TD)	Retrograde Condensate Gas

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
Wasatch	surface	surface
Evanston	646'	646'
Gannet(upside dn)	2236'	2235'
Bear River " "	5085'	5083'
Gannet	7120'	7117'
Stump	10162'	10145'
Preuss	10170'	10153'
Salt	11226'	11200'
Basal Preuss	12114'	12085'
Twin Creek	12185'	12155'
Leeds Creek	12916'	12873'
Watton Canyon	13080'	13028'
Boundry Ridge	13438'	13555'
Rich	13488'	13400'
Slide Rock	13748'	13630'
Gypsum Springs	13836'	13706'
Nugget	13938'	13793'

UTAH NATURAL RESOURCES
Oil, Gas & Mining
355 West North Temple, 3 Triad Center, Suite 350, Salt Lake City, Ut 84180-1203. (801-538-5340)

MONTHLY OIL AND GAS PRODUCTION REPORT

052108

Operator name and address:

AMOCO PRODUCTION COMPANY
P O BOX 829
EVANSTON WY 82930
ATTN: PRODUCTION & REVENUE

RECEIVED
MAY 05 1987
DIVISION OF
OIL, GAS & MINING

Utah Account No. N0050

Report Period (Month/Year) 3 / 87

Amended Report ☐

Well Name API Number	Entity	Location	Producing Zone	Days Oper	Production Volume Oil (BBL)	Gas (MSCF)	Water (BBL)
CHAMPLIN 544D #2 4304330246	04544	03N 07E 25	NGSD	20	1,148	1,332	3,830
CHAMPLIN 846 B-1 4304330253	09795	05N 07E 25	TWNCR	31	1,703	179,479	0
~~ANSCHUTZ RANCH EAST W30-13 4304330279~~	~~99997~~	~~04N 07E 25~~	NGSD	31	~~142,953~~	~~344,987~~	~~464~~
Page 1 total						27,942	11,058
Page 2 total						180,811	3,830
TOTAL					4,052	208,753	14,888

This well has been correctly changed in the IBM to show Entity 4540, but the operator shows up as Amoco Prod. Co. It should be Amoco Rockmount. Please check with Arlene on bonding to make sure the change can be ~~done~~ made without problem.

Needs to be changed to Amoco Rockmount per Entity Form per Don Staley. Effec. date 2/12/87. They already have wells under 4540. DT

Comments (attach separate sheet if necessary) W30-13 should be under Entity No. 4540. See the attached copy of Form DOGM Form 6. (correct — change effective 2-12-87 — check bonding) DTS

I have reviewed this report and certify the information to be accurate and complete. Date 4/30/87

Louis T. Pozzie
Authorized signature

Telephone (307) 789-1700

PLEASE COMPLETE FORMS IN BLACK INK

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

ENTITY ACTION FORM - DOGM FORM 6

OPERATOR: Amoco Rockmount Co.
ADDRESS: P.O. Box 829
Evanston, Wyo. 82930

OPERATOR CODE: N1390
PHONE NO. (307) 789-1700

OPERATORS MUST COMPLETE FORM UPON SPUDDING NEW WELL OR WHEN CHANGE IN OPERATIONS OR INTERESTS NECESSITATES CHANGE IN EXISTING ENTITY NUMBER ASSIGNMENT.

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION QQ	SC	TP	RG	COUNTY	SPUD DATE	EFFECTIVE DATE
B	04540	same	4304330279	Anschutz Ranch East W30-13	SESE	25	4N	7E	Summit	9-10-86	2-12-87

COMMENTS:

COMMENTS:

COMMENTS:

COMMENTS:

COMMENTS:

RECEIVED
MAY 05 1987
DIVISION OF
OIL, GAS & MINING

ACTION CODES:
A - ESTABLISH NEW ENTITY FOR NEW WELL
B - ADD NEW WELL TO EXISTING ENTITY
C - RE-ASSIGN WELL FROM ONE EXISTING ENTITY TO ANOTHER EXISTING ENTITY
D - RE-ASSIGN WELL FROM ONE EXISTING ENTITY TO A NEW ENTITY
E - OTHER (EXPLAIN IN COMMENTS SECTION)
(SEE INSTRUCTIONS)

Lois Rogers
SIGNATURE

Administrative Supervisor 3-19-8
TITLE DATE

UTAH
NATURAL RESOURCES

To: Gil ~~[illegible]~~ 5/27/86

From: JRB

Date: 5-22-86

- [x] For your information ~~and file~~. → then to well records.
- [ ] For necessary action.
- [ ] Reply directly to origin with a copy to this office.
- [ ] Please draft a reply for signature of _____

  _____ and

  return by the following date _____.
- [ ] Other _____

  _____

  _____

  _____

  _____

Form OGC-1b

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

RECEIVED
MAY 22 1987
DIVISION OF OIL, GAS & MINING

1. OIL WELL ☐ GAS WELL ☒ OTHER

2. NAME OF OPERATOR: AMOCO PRODUCTION COMPANY

3. ADDRESS OF OPERATOR: P. O. BOX 829, EVANSTON, WYOMING 82930

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface: SESE Sec. 25, 382' FEL & 597' FSL

5. LEASE DESIGNATION AND SERIAL NO.: Fee

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: 060804 PGW

7. UNIT AGREEMENT NAME: Anschutz Ranch East

8. FARM OR LEASE NAME: W30-13

9. WELL NO.: W30-13

10. FIELD AND POOL, OR WILDCAT: Anschutz Ranch East

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 25, T4N, R7E

12. COUNTY OR PARISH: Summit

13. STATE: Utah

14. PERMIT NO.: 43-043-30279

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 7845' GR

16. **Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other)			☐
(Other)	☐						

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

As per telecon between John Baza (Utah O & G) and J. M. Greener (Amoco) on 5/15/87 - 1515 hrs - this is a notification that the annular disposal operations on the above well have been terminated.

An estimated 15,000 bbls of reserve pit fluid was injected into the Gannet formation between 5500' - 5624' (see attached temperature survey). Injection pressure ranged from 2500# - 2900#. Operations were ceased when the injection pressure reached the maximum allowable surface pressure of 3000#.

18. I hereby certify that the foregoing is true and correct

SIGNED Louis F. Lozzi TITLE Administrative Supervisor DATE 5-20-87

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Amoco Production Co.

Anchutz Ranch W 30-13

43-043-30279

BHL
SESE 5.25 T4N R7E

SURF
SWSW 5.30 T4N R8E

vftg also

✓ file + computer
then tell Chris what
is correct.
6-22-92

06/22/92 D E T A I L W E L L D A T A menu: opt 00

api num:	4304330279	prod zone: NGSD	sec	twnshp	range	qr-qr
entity:	4540 : ANSCHUTZ RANCH UNIT		25	4.0 N	7.0 E	SESE

well name: ANSCHUTZ RANCH EAST W30-13
operator: N1390 : AMOCO ROCMOUNT COMPANY meridian: S
field: 505 : ANSCHUTZ RANCH EAST
confidential flag: confidential expires: alt addr flag:

* * * application to drill, deepen, or plug back * * *

lease number: FEE lease type: 4 well type: GW
surface loc: 0597 FSL 0382 FEL unit name: ANSCHUTZ RANCH EAST
prod zone loc: 0066 FSL 0185 FWL depth: 14650 proposed zone: NGSD
elevation: 7845 GR apd date: 860723 auth code: 203

* * * completion report information * * * date recd: 870302

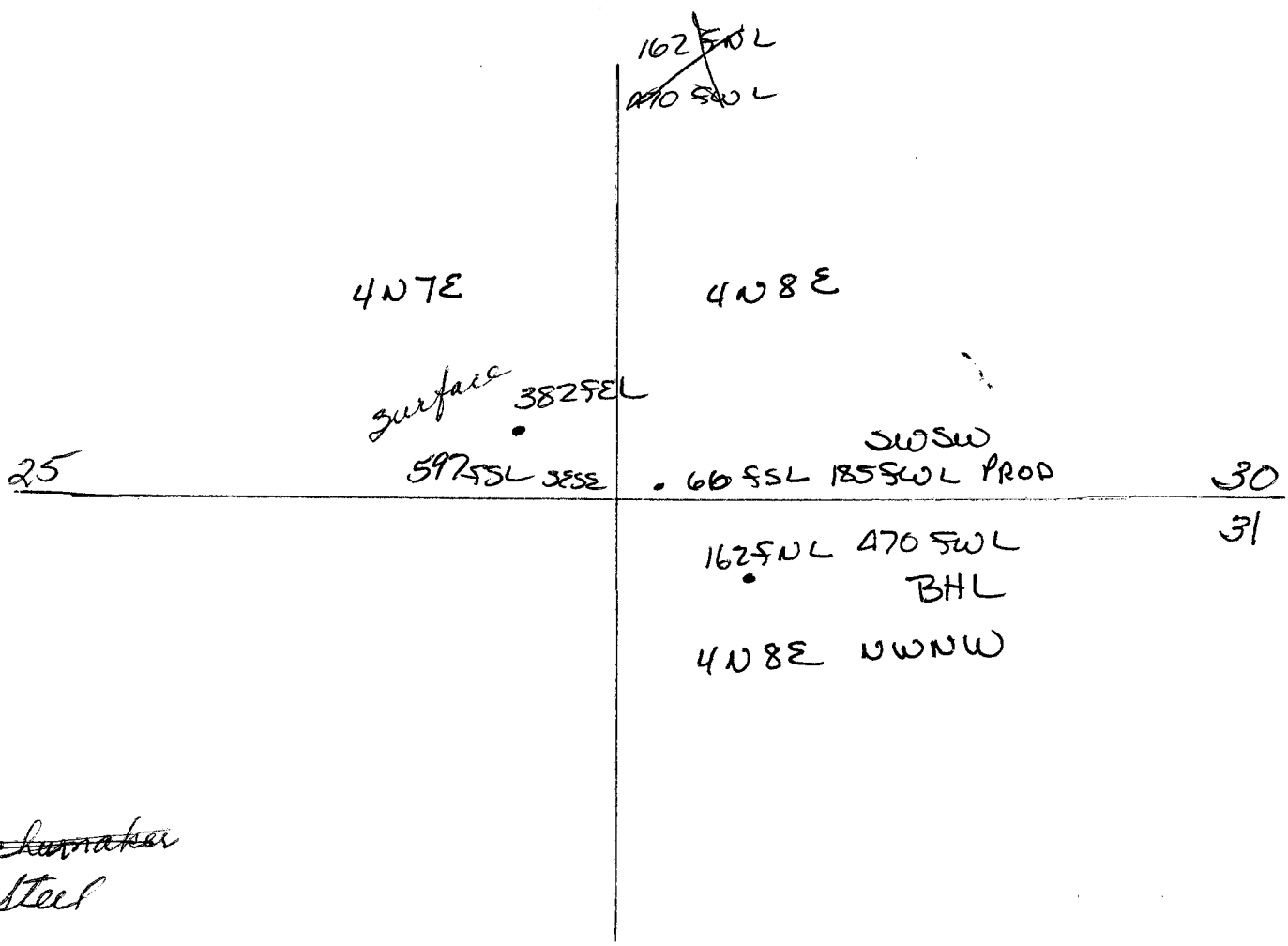
spud date: 860910 compl date: 870212 total depth: 14635' MD
producing intervals: 13938-14635'
bottom hole: 0162 FNL 0470 FWL first prod: 870215 well status: PGW
24hr oil: 4150 24hr gas: 10000 24hr water: gas/oil ratio: 2410

* * well comments: api gravity: 46.00

861209 TWP,RNG,SEC,QR-QR CHANGED TO BOTTOM HOLE LOCATION;870309 CHANGED BACK TO SURFACE LOC;PROD LOC IS IN T4N R8E SEC 30 SWSW,BHL T4N R8E SEC 30 NWNW 870330 SURF LOC CHGD FROM 0530 FSL 0450 FEL EFF 860729. 870406 PEN 04540.

opt: 21 api: 4304330279 zone: date(yymm): enty acct:

Sec 31

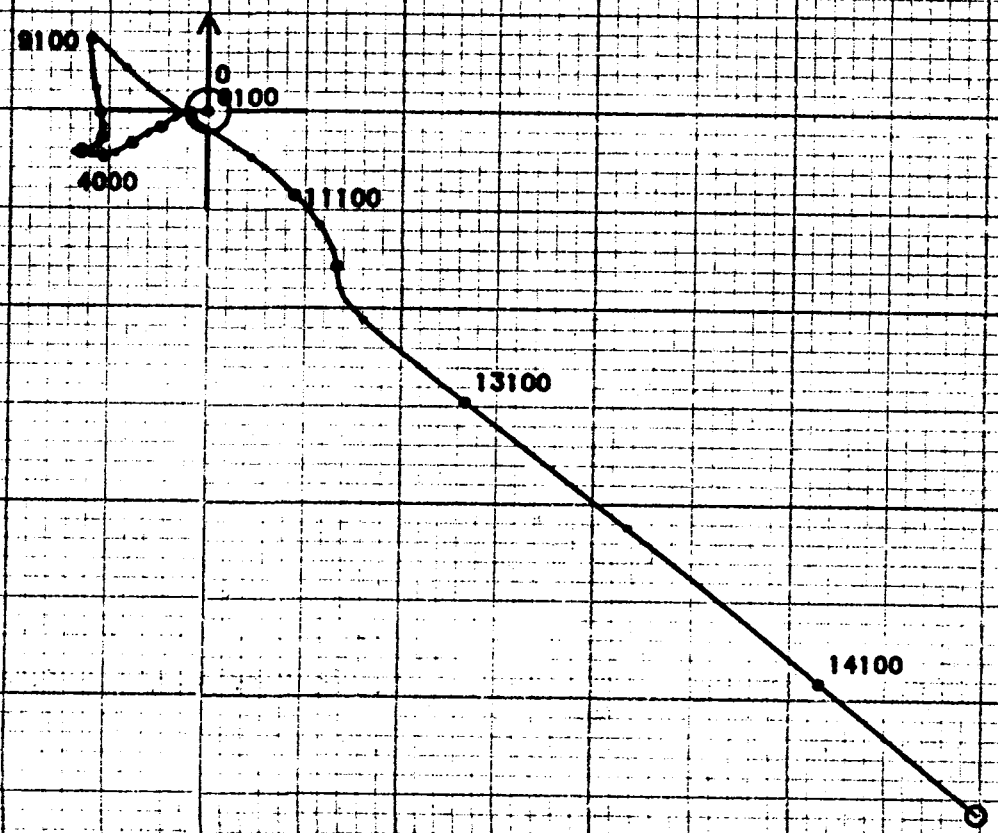


~~Greg Schumaker~~
Roger Steel
~~Sheryl~~

AMOCO PRODUCTION COMPANY
ANSCHUTZ RANCH EAST FLD
WELL: ARE W30-13 SLOT: 17

HORIZONTAL PROJECTION

SCALE 1 IN. = 200 FEET
DEPTH INDICATOR: MD



FINAL STATION:
14500 MD, 14270.85 TVD
716.22 SOUTH, 796.61 EAST
CLOSURE 1071.24 AT S 48 02 E

State of Delaware

Office of the Secretary of State

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF DISSOLUTION OF "AMOCO ROCMOUNT COMPANY", FILED IN THIS OFFICE ON THE THIRTY-FIRST DAY OF JANUARY, A.D. 1995, AT 10 O'CLOCK A.M.

A CERTIFIED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS FOR RECORDING.

Change of operator. Amoco Rocmount to Amoco Production Co Effective 1/31/95

Edward J. Freel

Edward J. Freel, Secretary of State

0934277 8100

950022938

AUTHENTICATION: 7391913

DATE: 01-31-95

ATTN: Lisha Cordova 4 pages

801-359-3904

Ed Hadlock
Amoco Prod. Co
303-830-4993

CERTIFICATE OF DISSOLUTION

OF

AMOCO ROCMOUNT COMPANY

AMOCO ROCMOUNT COMPANY, a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware,

DOES HEREBY CERTIFY:

FIRST: That dissolution was authorized on January 19, 1995.

SECOND: That dissolution has been authorized by the unanimous written consent of all of the stockholders of the corporation entitled to vote on a dissolution in accordance with the provisions of subsection (c) of section 275 of the General Corporation Law of the State of Delaware.

THIRD: That the names and addresses of the directors and officers of AMOCO ROCMOUNT COMPANY are as follows:

DIRECTORS

NAMES	ADDRESSES
J. M. Brown	501 WestLake Park Boulevard Houston, TX 77079
J. M. Gross	501 WestLake Park Boulevard Houston, TX 77079
D. H. Welch	200 East Randolph Drive Chicago, IL 60601

OFFICERS

NAMES	OFFICES	ADDRESS
J. M. Brown	President	501 WestLake Park Blvd. Houston, TX 77079
M. R. Gile	Vice President	1670 Broadway Denver, CO 80202
J. N. Jaggers	Vice President	1670 Broadway Denver, CO 80202

NAMES	OFFICES	ADDRESS
D. H. Welch	Vice President	200 East Randolph Drive Chicago, IL 60601
J. M. Gross	Secretary	501 WestLake Park Blvd. Houston, TX 77079
R. B. Wilson	Assistant Secretary	1670 Broadway Denver, CO 80202
Rebecca Gormezano	Assistant Secretary	200 East Randolph Drive Chicago, IL 60601
C. F. Helm	Assistant Secretary	519 S. Boston Tulsa, OK 74103
A. L. Haws	Assistant Secretary	501 WestLake Park Blvd. Houston, TX 77079
Daniel B. Pinkert	Assistant Secretary	200 East Randolph Drive Chicago, IL 60601
G. L. Paulson	Assistant Secretary	1670 Broadway Denver, CO 80202
J. E. Rutter	Assistant Secretary	501 WestLake Park Blvd. Houston, TX 77079
J. L. Siddall	Assistant Secretary	200 East Randolph Drive Chicago, IL 60601
M. J. Stonecipher	Assistant Secretary	519 S. Boston Tulsa, OK 74103
Rebecca S. McGee	Assistant Secretary	1670 Broadway Denver, CO 80202
Gerald M. Wilson	Assistant Secretary	200 East Randolph Drive Chicago, IL 60601
Marsha Williams	Treasurer	200 East Randolph Drive Chicago, IL 60601

IN WITNESS WHEREOF, said AMOCO ROCMOUNT COMPANY has caused this certificate to be signed by M. R. Gile, its Vice President, and attested by Rebecca S. McGee, its Assistant Secretary, this 26th day of January, 1995.

AMOCO ROCMOUNT COMPANY

By _____
M. R. Gile, Vice President

ATTEST:

By Rebecca S. McGee
Assistant Secretary

STATE OF COLORADO)
) ss.
CITY OF DENVER)

I, Sheryl A. White, a Notary Public, do hereby certify that M. R. GILE and Robert S. McGee of the above named AMOCO ROCMOUNT COMPANY, personally known to me to be the same persons whose names are subscribed to the foregoing instrument as Vice President and Assistant Secretary, respectively, appeared before me this day in person, and acknowledged that they signed, sealed and delivered the said instrument as the free and voluntary act of said AMOCO ROCMOUNT COMPANY, and as their own free and voluntary act as Vice President and Assistant Secretary, respectively, for the uses and purposes therein set forth.

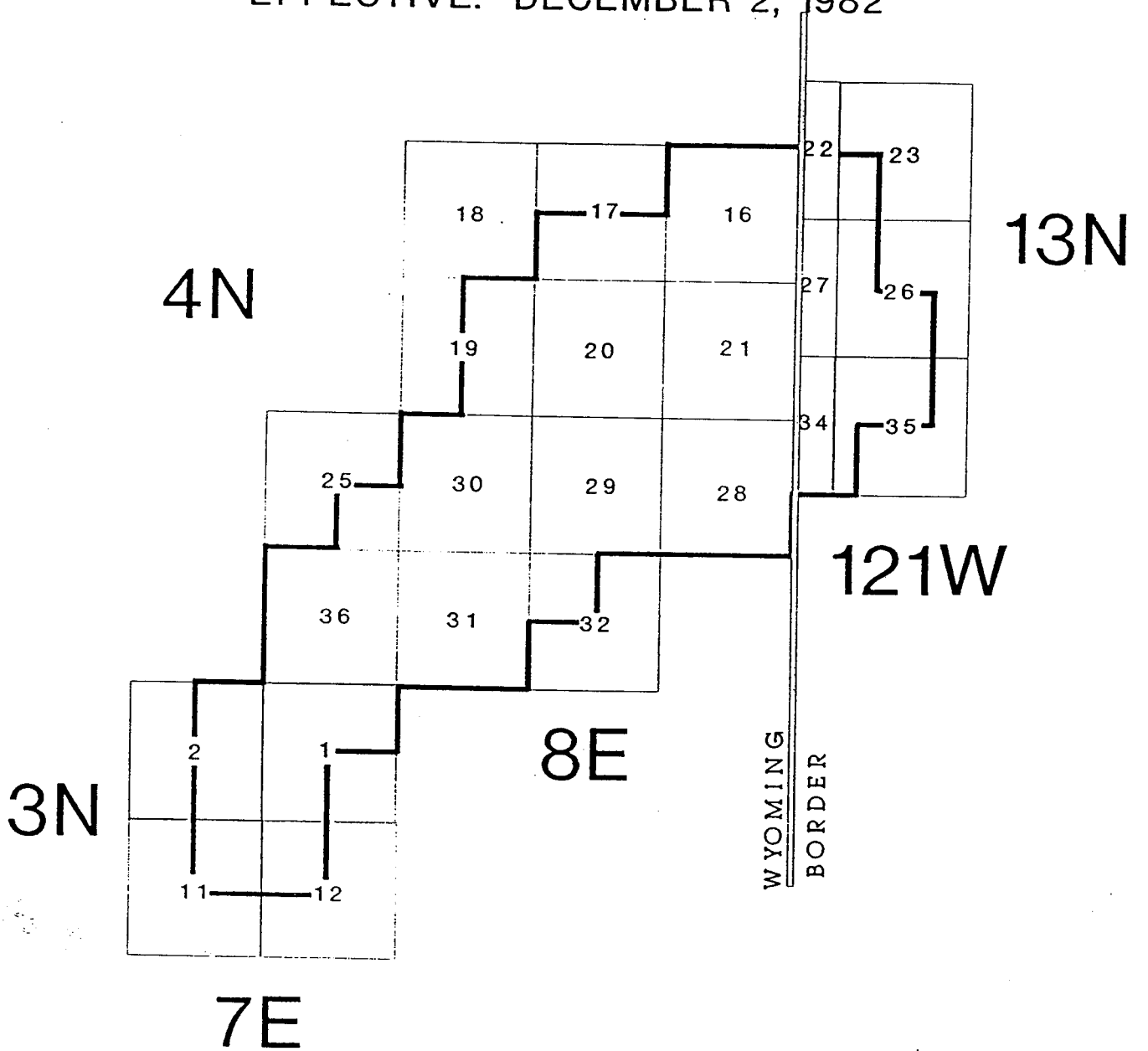
GIVEN under my hand and official seal this 26th day of January, 1995.

Sheryl White
Notary Public

ANSCHUTZ RANCH EAST UNIT

Summit County, Utah

EFFECTIVE: DECEMBER 2, 1982



UNIT OUTLINE (UTU67938X)

AS CONTRACTED DECEMBER 1, 1992

22,158.00 ACRES

Division of Oil, Gas and Mining

OPERATOR CHANGE WORKSHEET

Routing	
1-LEC ✓	6-LEC ✓
2-GLH ✓	7-KAS ✓
~~3-DTS~~ ✓	8-SI ✓
4-VLD ✓	9-FILE ✓
5-JRB ✓	

Attach all documentation received by the division regarding this change.
Initial each listed item when completed. Write N/A if item is not applicable.

XXX Change of Operator (~~well sold~~)
☐ Designation of Operator
☐ Designation of Agent
☐ Operator Name Change Only

The operator of the well(s) listed below has changed, **effective:** 1-31-95

TO: (new operator) AMOCO PRODUCTION COMPANY
(address) PO BOX 800
DENVER CO 80201
Phone: (303)830-5340
Account no. N0050

FROM: (old operator) AMOCO ROCMOUNT COMPANY
(address) PO BOX 800
DENVER CO 80201
ED HADLOCK
Phone: (303)830-5340
Account no. N1390

WELL(S) attach additional page if needed: *ANSCHUTZ RANCH EAST UNIT

Name:	API:	Entity:	S	T	R	Lease:
SEE ATTACHED	43-043-30279					

OPERATOR CHANGE DOCUMENTATION

lec 1. (r649-8-10) Sundry or other legal documentation has been received from the **FORMER** operator (attach to this form). (Reg. 2-19-98) (Rec'd 2-26-98)

lec 2. (r649-8-10) Sundry or other legal documentation has been received from the **NEW** operator (Attach to this form). (Rec'd 2-11-98)

N/A 3. The **Department of Commerce** has been contacted if the new operator above is not currently operating any wells in Utah. Is the company **registered with the state?** (yes/no) _____ If yes, show company file number: _____.

N/A 4. **FOR INDIAN AND FEDERAL WELLS ONLY.** The BLM has been contacted regarding this change. Make note of BLM status in comments section of this form. BLM approval of **Federal** and **Indian** well operator changes should ordinarily take place prior to the division's approval, and before the completion of **steps 5 through 9** below.

lec 5. Changes have been entered in the **Oil and Gas Information System** (3270) for each well listed above. (2-26-98) * QuattroPro/UIC "No Chg." , DBASE/UIC "No Chg." (See comments)

lec 6. **Cardex** file has been updated for each well listed above. (2-26-98)

lec 7. Well **file labels** have been updated for each well listed above. (2-26-98)

lec 8. Changes have been included on the monthly "Operator, Address, and Account Changes" **memo** for distribution to Trust Lands, Sovereign Lands, UGS, Tax Commission, etc. (2-26-98)

lec 9. A folder has been set up for the **Operator Change file**, and a copy of this page has been placed there for reference during routing and processing of the original documents.

c:\dons\wpdocs\forms\operchng

- OVER -

OPERATOR CHANGE WORKSHEET (continued) - Initial each item when completed. Write N/A if item is not applicable.

ENTITY REVIEW

Lec 1. (r649-8-7) **Entity assignments have been reviewed** for all wells listed above. Were entity changes made? (yes/no) ____ If entity assignments were changed, attach copies of Form 6, Entity Action Form.
4540 "Unit Entity"

N/A 2. Trust Lands, Sovereign Lands, Tax Commission, etc., have been **notified** through normal procedures of entity changes.

BOND VERIFICATION - (FEE WELLS ONLY)

Surety No. 831094 (80,000) Issued by Seaboard Surety Co. in behalf of Amoco Prod. Co. and Amoco Rocmount Co.

Lec 1. (r649-3-1) The **NEW** operator of any fee lease well listed above has furnished a proper bond.

Lec 2. A **copy of this form** has been placed in the new and former operator's bond files.

Lec 3. The **FORMER** operator has requested a release of liability from their bond (yes/no) ____, as of today's date 2-19-98. If yes, division response was made to this request by letter dated _____.

LEASE INTEREST OWNER NOTIFICATION OF RESPONSIBILITY

N/A/Lec 1. Copies of documents have been sent on _____ to _____ at Trust Lands for changes involving State leases, in order to remind that agency of their responsibility to review for proper bonding.

Lec 2. (r649-2-10) The former operator of any fee lease wells listed above has been contacted and informed by letter dated Feb. 26, 1998, of their responsibility to notify all interest owners of this change.

FILMING

VB 1. All attachments to this form have been **microfilmed**. Today's date: 3.20.98.

FILING

CHP 1. **Copies** of all attachments to this form have been filed in each **well file**.

__ 2. The **original of this form**, and the **original attachments** are now being filed in the Operator Change file.

COMMENTS

980219 Recognized oper. for Anschutz Ranch East Unit (State Unit) already Amoco Production Co.

* UIC Wells (Disposal & Gas Injection) were never changed to Amoco Rocmount Company, no change necessary! They were changed in 3270 and have now been changed back to Amoco Prod. Co.

FORM 10

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING
1594 West North Temple, Suite 1210, PO Box 145801, Salt Lake City, UT 84114-5801

MONTHLY OIL AND GAS PRODUCTION REPORT

OPERATOR NAME AND ADDRESS:

DEMETRIA MARTINEZ
AMOCO ROCMOUNT COMPANY
PO BOX 800
DENVER CO 80201

UTAH ACCOUNT NUMBER: N1390

REPORT PERIOD (MONTH/YEAR): 12 / 97

AMENDED REPORT ☐ **(Highlight Changes)**

Well Name API Number	Entity	Location	Producing Zone	Well Status	Days Oper	Production Volumes OIL(BBL)	GAS(MCF)	WATER(BBL)
ANSCHUTZ RANCH EAST W16-12 4304330231	04540	04N 08E 16	NGSD			Fee		
ANSCHUTZ RANCH EAST W20-04 4304330238	04540	04N 08E 20	NGSD			"		
ANSCHUTZ RANCH EAST W29-06A 4304330250	04540	04N 08E 29	NGSD			"		
ANSCHUTZ RANCH EAST W29-14A 4304330251	04540	04N 08E 29	NGSD			"		
ANSCHUTZ RANCH EAST E28-12 4304330257	04540	04N 08E 28	NGSD			"		
ANSCHUTZ RANCH EAST W01-04 4304330270	04540	03N 07E 1	NGSD			"		
ANSCHUTZ RANCH EAST W01-12 4304330271	04540	03N 07E 1	NGSD			"		
ANSCHUTZ RANCH EAST W30-06 4304330273	04540	04N 08E 30	NGSD			"		
ANSCHUTZ RANCH EAST W11-1 4304330277	04540	03N 07E 11	NGSD			"		
ANSCHUTZ RANCH EAST W30-13 4304330279	04540	04N 07E 25	NGSD			"		
ANSCHUTZ RANCH EAST W12-04 4304330283	04540	03N 07E 2	NGSD			"		
ANSCHUTZ RANCH EAST W20-09 4304330286	04540	04N 08E 20	NGSD			"		
ANSCHUTZ RANCH EAST W20-03 4304330291	04540	04N 08E 20	NGSD			"		
					TOTALS			

COMMENTS:

hereby certify that this report is true and complete to the best of my knowledge.

Date:

ame and Signature:

Telephone Number:

FORM 9

STATE OF UTAH

DIVISION OF OIL, GAS AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells. Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such proposals.

5. Lease Designation and Serial Number:

6. If Indian, Allottee or Tribe Name: Anschutz Ranch East

7. Unit Agreement Name: W30-13

8. Well Name and Number:

9. API Well Number: 43-043-30279

10. Field and Pool, or Wildcat: Anschut Ranch

1. Type of Well: OIL ☐ GAS ☒ OTHER:

2. Name of Operator: Amoco Production Company

3. Address and Telephone Number: P.O. Box 800, Rm 812B, Denver, CO 80201 (303) 830-4781

4. Location of Well

Footages: 100' FSL, 450' FEL

QQ, Sec.,T.,R.,M.: Sec 25, T4N, R7E

County: Summit

State: Utah

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

NOTICE OF INTENT
(Submit in Duplicate)

- ☐ Abandonment
- ☐ Casing Repair
- ☐ Change of Plans
- ☐ Conversion to Injection
- ☒ Fracture Treat
- ☐ Multiple Completion
- ☐ Other
- ☐ New Construction
- ☐ Pull or Alter Casing
- ☐ Recompletion
- ☐ Shoot or Acidize
- ☐ Vent or Flare
- ☐ Water Shut-Off

Approximate date work will start

SUBSEQUENT REPORT
(Submit Original Form Only)

- ☐ Abandonment *
- ☐ Casing Repair
- ☐ Change of Plans
- ☐ Conversion to Injection
- ☐ Fracture Treat
- ☐ Other
- ☐ New Construction
- ☐ Pull or Alter Casing
- ☐ Shoot or Acidize
- ☐ Vent or Flare
- ☐ Water Shut-Off

Date of work completion

Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form.

* Must be accompanied by a cement verification report.

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Amoco Production Company is now the operator of the above mentioned well. We will be operating under Utah Bond # 831094. This is effective 1/31/95.

If you require additional information, please contact Gigi Martinez @ (303) 830-4781.

13.

Name & Signature: G. G. Martinez

Title: Permit Agent

Date: 2/5/98

(This space for State use only)

State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor
Ted Stewart
Executive Director
Lowell P. Braxton
Division Director

1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114-5801
801-538-5340
801-359-3940 (Fax)
801-538-7223 (TDD)

February 26, 1998

G. G. Martinez
Amoco Production Company
P. O. Box 800, Room 812B
Denver, Colorado 80201

Re: Notification of Sale or Transfer of Fee Lease Interest

The Division has received notification of a change of operator from Amoco Rocmount Company to Amoco Production Company for the following wells which are located on fee leases:

Well Name	Sec.-T.-R.	API Number
(Anschutz Ranch East "ARE")		
ARE W20-08	20-04N-08E	43-043-30123
ARE 29-04ST1	29-04N-08E	43-043-30129
ARE E21-14	21-04N-08E	43-043-30130
ARE W21-04	21-04N-08E	43-043-30135
ARE W29-02	29-04N-08E	43-043-30136
ARE W16-06	16-04N-08E	43-043-30138
ARE W20-16	20-04N-08E	43-043-30148
ARE W30-16	30-04N-08E	43-043-30156
ARE W36-16	36-04N-07E	43-043-30157
ARE W20-06	20-04N-08E	43-043-30159
ARE W32-04	32-04N-08E	43-043-30162
ARE W31-08	31-04N-08E	43-043-30164
ARE W31-04	31-04N-08E	43-043-30165
ARE W17-16	17-04N-08E	43-043-30176
ARE W30-08	30-04N-08E	43-043-30183
ARE W30-14	30-04N-08E	43-043-30185
ARE W01-06	01-03N-07E	43-043-30188
ARE W31-12	31-04N-08E	43-043-30190
ARE W19-16	19-04N-08E	43-043-30204
ARE W30-10	30-04N-08E	43-043-30215
ARE W31-06	31-04N-08E	43-043-30217

ARE W20-12	20-04N-08E	43-043-30220
ARE E28-06	28-04N-08E	43-043-30226
ARE W36-10	36-04N-07E	43-043-30227
ARE W20-02	20-04N-08E	43-043-30228
ARE W20-10	20-04N-08E	43-043-30229
ARE W16-12	16-04N-08E	43-043-30231
ARE W20-04	20-04N-08E	43-043-30238
ARE W29-06A	29-04N-08E	43-043-30250
ARE W29-14A	29-04N-08E	43-043-30251
ARE E28-12	28-04N-08E	43-043-30257
ARE W01-04	01-03N-07E	43-043-30270
ARE W01-12	01-03N-07E	43-043-30271
ARE W30-06	30-04N-08E	43-043-30273
ARE W11-1	11-03N-07E	43-043-30277
ARE W30-13	25-04N-07E	43-043-30279
ARE W12-04	02-03N-07E	43-043-30283
ARE W20-09	20-04N-08E	43-043-30286
ARE W20-03	20-04N-08E	43-043-30291

Utah Administrative Rule R649-2-10 states; the owner of a lease shall provide notification to any person with an interest in such lease, when all or part of that interest in the lease is sold or transferred.

This letter is written to advise Amoco Production Company of its responsibility to notify all individuals with an interest in these leases (royalty interest and working interest) of the change of operator. Please provide written documentation of this notification to:

Utah Royalty Owners Association
Box 1292
Roosevelt, Utah 84066

Your assistance in this matter is appreciated.

Sincerely,

Lisha Cordova

Lisha Cordova
Admin. Analyst, Oil & Gas

cc: Amoco Rocmount Company, Ed Hadlock
Utah Royalty Owners Association, Stephen Evans
John R. Baza, Associate Director
Operator File(s)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER:

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME: See Attached

8. WELL NAME and NUMBER: See Attached

9. API NUMBER: Attached

10. FIELD AND POOL, OR WILDCAT: See Attached

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ OTHER See Attached

2. NAME OF OPERATOR: Amoco Production Company

3. ADDRESS OF OPERATOR: 501 Westlake Park Blvd CITY Houston STATE TX ZIP 77079 PHONE NUMBER: (281) 366-5328

4. LOCATION OF WELL

FOOTAGES AT SURFACE: See Attached

COUNTY: See Attached

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☑ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start:	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☐ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☑ OTHER: Operator Name Change
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Amoco Production Company proposes to change its name to BP America Production Company, effective December 31, 2001. Mailing addresses and designated agents shall remain the same.

Attached to this sundry is a listing of wells currently operated by Amoco Production Company. This list includes all wells with the exception of those wells which have a plugged or D&A status.

Also attached for the Board's file is a copy of the Board Resolution approving the name change.

NAME (PLEASE PRINT) Alan Wood TITLE Regulatory Engineer

SIGNATURE DATE 12/11/2001

(This space for State use only)

RECEIVED

DEC 13 2001

DIVISION OF OIL, GAS AND MINING

(5/2000)

(See Instructions on Reverse Side)

UNITED STATES OF AMERICA §
STATE OF TEXAS §
COUNTY OF HARRIS §
CITY OF HOUSTON §

CERTIFICATE

M. S. Haskins, of lawful age, first being duly sworn on oath, deposes and says:

1. That she is the duly elected, qualified and acting Assistant Secretary of Amoco Production Company, a corporation organized and existing under the laws of the State of Delaware, U.S.A.;

2. That on November 12, 2001, by consent action of the Board of Directors of Amoco Production Company (hereinafter referred to as "Company"), the following resolutions were adopted:

> WHEREAS, in connection with BP America Inc.'s ("BP") integration of Atlantic Richfield Company ("ARCO") and Vastar Resources, Inc. ("Vastar"), BP has elected to reorganize, consolidate and merge its upstream onshore Lower 48 assets into a single legal entity to align BP's legal structure with its business organization and to improve operating efficiencies; and
>
> WHEREAS, BP desires Amoco Production Company ("Company") to be such single legal entity for the purposes of such reorganization, consolidation and merger; and
>
> WHEREAS such reorganization, consolidation and merger shall be accomplished by December 31, 2001 pursuant to a Reorganization Agreement ("Agreement") by and between ARCO and BP Company North America Inc. ("BP Company NA"), the parent of Company, resulting in ARCO's upstream onshore Lower 48 assets being transferred to Company and Vastar being merged into Company; and
>
> WHEREAS, pursuant to such Agreement, asset, stock and liability transfers will occur in consideration for Class B common stock of BP Company NA and Company's agreement to assume all obligations and indemnify ARCO for all past and future liabilities relating to such transfers; and
>
> WHEREAS, in connection with such reorganization, Company desires to change its name to BP America Production Company, effective December 31, 2001 with corporate seal as follows; and

WHEREAS all officers and directors of Company will remain unchanged.

NOW, THEREFORE, BE IT,

RESOLVED, Company will accept asset, stock and liability transfers effective December 31, 2001 pursuant to the Agreement and will assume all obligations and indemnify ARCO for all past or future liabilities relating to such transfers.

FURTHER RESOLVED, Company will change its name and corporate seal to BP America Production Company, effective December 31, 2001 and all officers and directors will remain unchanged.

3. That the aforesaid resolutions have not been amended, rescinded, or annulled, but remain in full force and effect on the date hereof.

EXECUTED in the City of Houston, State of Texas, on this the 13 day of November, 2001.

[Corporate Seal]

M. S. Haskins

SUBSCRIBED and sworn to before me this 13 day of November, 2001.

(Notary Seal)

DENISE ROBERTSON
Notary Public, State of Texas
My Commission Expires
October 12, 2004

NOTARY PUBLIC, STATE OF TEXAS

API Well Number	Operator	Well Name	Well Type	Well Status	Field Name	Sec	Twp-Rng
43-043-30096-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST W16-14	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	16	4N-8E
43-043-30106-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST 34-2	SWD	Active Well	ANSCHUTZ RANCH EAST	34	4N-7E
43-043-30123-00-00	AMOCO PRODUCTION CO	ARE W20-08	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	20	4N-8E
43-043-30129-00-00	AMOCO PRODUCTION CO	ARE 29-04ST1	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	29	4N-8E
43-043-30130-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST E21-14	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	21	4N-8E
43-043-30135-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST W21-04	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	21	4N-8E
43-043-30136-00-00	AMOCO PRODUCTION CO	ARE W29-02	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	29	4N-8E
43-043-30138-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST W16-06	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	16	4N-8E
43-043-30139-00-00	AMOCO PRODUCTION CO	ISLAND RANCHING C-1	SWD	Active Well	ANSCHUTZ RANCH EAST	26	4N-7E
43-043-30143-00-00	AMOCO PRODUCTION CO	CHAMPLIN 372 AMOCO C 1	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	23	4N-7E
43-043-30145-00-00	AMOCO PRODUCTION CO	ARE W20-14	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	20	4N-8E
43-043-30148-00-00	AMOCO PRODUCTION CO	ARE W20-16	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	20	4N-8E
43-043-30154-00-00	AMOCO PRODUCTION CO	ARE W29-12	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	29	4N-8E
43-043-30156-00-00	AMOCO PRODUCTION CO	ARE W30-16	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	30	4N-8E
43-043-30157-00-00	AMOCO PRODUCTION CO	ARE W36-16	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	36	4N-7E
43-043-30159-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST W20-06	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	20	4N-8E
43-043-30161-00-00	AMOCO PRODUCTION CO	ISLAND RANCHING D-1	Gas Well	Shut_In	**WEBER FORMATION**	14	4N-7E
43-043-30162-00-00	AMOCO PRODUCTION CO	ARE W32-04	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	32	4N-8E
43-043-30164-00-00	AMOCO PRODUCTION CO	ARE W31-08	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	31	4N-8E
43-043-30165-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST W31-04 E	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	31	4N-8E
43-043-30167-00-00	AMOCO PRODUCTION CO	ARE W36-08	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	36	4N-7E
43-043-30168-00-00	AMOCO PRODUCTION CO	CHAMPLIN 387 B1A	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	9	3N-7E
43-043-30170-00-00	AMOCO PRODUCTION CO	CHAMPLIN 372 D-1	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	23	4N-7E
43-043-30176-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST W17-16	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	17	4N-8E
43-043-30183-00-00	AMOCO PRODUCTION CO	ARE W30-08	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	30	4N-8E
43-043-30185-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST W30-14	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	30	4N-8E
43-043-30188-00-00	AMOCO PRODUCTION CO	ARE W01-06	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	1	3N-7E
43-043-30190-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST W31-12	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	31	4N-8E
43-043-30204-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST W19-16	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	19	4N-8E
43-043-30209-00-00	AMOCO PRODUCTION CO	ARE W1-02	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	1	3N-7E
43-043-30215-00-00	AMOCO PRODUCTION CO	ARE W30-10	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	30	4N-8E
43-043-30216-00-00	AMOCO PRODUCTION CO	ARE W30-15	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	30	4N-8E
43-043-30217-00-00	AMOCO PRODUCTION CO	ARE W31-06	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	31	4N-8E
43-043-30218-00-00	AMOCO PRODUCTION CO	ARE W30-02	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	30	4N-8E

API Well Number	Operator	Well Name	Well Type	Well Status	Field Name	Sec	Twp-Rng
43-043-30220-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST W20-12	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	20	4N-8E
43-043-30226-00-00	AMOCO PRODUCTION CO	ARE E28-06	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	28	4N-8E
43-043-30227-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST W36-10	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	36	4N-7E
43-043-30228-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST W20-02	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	20	4N-8E
43-043-30229-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST W20-10	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	20	4N-8E
43-043-30231-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST W16-12	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	16	4N-8E
43-043-30238-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST W20-04	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	20	4N-8E
43-043-30248-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST W30-12A	GIW	Active Well	ANSCHUTZ RANCH EAST	30	4N-8E
43-043-30250-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST W29-06A	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	29	4N-8E
43-043-30251-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST W29-14A	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	29	4N-8E
43-043-30255-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST W36-14	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	36	4N-7E
43-043-30257-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST E28-12	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	28	4N-8E
43-043-30265-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST W2-10	GIW	Active Well	ANSCHUTZ RANCH EAST	2	3N-7E
43-043-30270-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST W01-04	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	1	3N-7E
43-043-30271-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST W01-12	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	1	3N-7E
43-043-30272-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST W19-08	GIW	Active Well	ANSCHUTZ RANCH EAST	19	4N-8E
43-043-30273-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST W30-06	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	30	4N-8E
43-043-30277-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST W11-1	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	11	3N-7E
43-043-30279-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST W30-13	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	25	4N-7E
43-043-30280-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST W31-05	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	31	4N-8E
43-043-30283-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST W12-04	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	2	3N-7E
43-043-30286-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST W20-09	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	20	4N-8E
43-043-30291-00-00	AMOCO PRODUCTION CO	ANSCHUTZ RANCH EAST W20-03	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	20	4N-8E

·Division of Oil, Gas and Mining

OPERATOR CHANGE WORKSHEET

ROUTING		
1. GLH		4-KAS
2. CDW ✓		5-LP
3. JLT		6-FILE

Enter date after each listed item is completed

Change of Operator (Well Sold) — Designation of Agent

X Operator Name Change — Merger

The operator of the well(s) listed below has changed, effective: **12-31-2001**

FROM: (Old Operator):	**TO:** (New Operator):
AMOCO PRODUCTION COMPANY	BP AMERICA PRODUCTION COMPANY
Address: 501 WESTLAKE PARK BLVD	Address: 501 WESTLAKE PARK BLVD
HOUSTON, TX 77079	HOUSTON,TX 77079
Phone: 1-(281)-366-5328	Phone: 1-(281)-366-5328
Account N0050	Account N1990

CA No. **Unit:** **ANSCHUTZ RANCH EAST**

WELL(S)

NAME	API NO.	ENTITY NO.	SEC. TWN RNG	LEASE TYPE	WELL TYPE	WELL STATUS
ANSCHUTZ RANCH EAST W01-06	43-043-30188	4540	01-3N-7E	FEE	GW	P
ANSCHUTZ RANCH EAST W01-02	43-043-30209	4540	01-3N-7E	FEE	GW	P
ANSCHUTZ RANCH EAST W01-04	43-043-30270	4540	01-3N-7E	FEE	GW	S
ANSCHUTZ RANCH EAST W01-12	43-043-30271	4540	01-3N-7E	FEE	GW	S
ANSCHUTZ RANCH EAST W12-04	43-043-30283	4540	02-3N-7E	FEE	GW	P
ANSCHUTZ RANCH EAST W11-1	43-043-30277	4540	11-3N-7E	FEE	GW	S
ANSCHUTZ RANCH EAST W30-13	43-043-30279	4540	25-4N-7E	FEE	GW	S
ANSCHUTZ RANCH EAST W36-08	43-043-30167	4540	36-4N-7E	FEE	GW	P
ANSCHUTZ RANCH EAST W36-16	43-043-30157	4540	36-4N-7E	FEE	GW	P
ANSCHUTZ RANCH EAST W36-10	43-043-30227	4540	36-4N-7E	FEE	GW	P
ANSCHUTZ RANCH EAST W36-14	43-043-30255	4540	36-4N-7E	FEE	GW	S
ANSCHUTZ RANCH EAST W16-06	43-043-30138	4540	16-4N-8E	FEE	GW	S
ANSCHUTZ RANCH EAST W16-12	43-043-30231	4540	16-4N-8E	FEE	GW	S
ANSCHUTZ RANCH EAST W16-14	43-043-30096	4540	16-4N-8E	FEE	GW	S
ANSCHUTZ RANCH EAST W17-16	43-043-30176	4540	17-4N-8E	FEE	GW	S
ANSCHUTZ RANCH EAST W19-16	43-043-30204	4540	19-4N-8E	FEE	GW	S
ANSCHUTZ RANCH EAST W20-08	43-043-30123	4540	20-4N-8E	FEE	GW	P
ANSCHUTZ RANCH EAST W20-14	43-043-30145	4540	20-4N-8E	FEE	GW	P
ANSCHUTZ RANCH EAST W20-06	43-043-30159	4540	20-4N-8E	FEE	GW	S
ANSCHUTZ RANCH EAST W20-16	43-043-30148	4540	20-4N-8E	FEE	GW	P

OPERATOR CHANGES DOCUMENTATION

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 12/13/2001
2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 12/13/2001

3. The new company has been checked through the **Department of Commerce, Division of Corporations Database on:** 12/14/2001

4. Is the new operator registered in the State of Utah: YES Business Number: PENDING

5. If **NO**, the operator was contacted contacted on: N/A

6. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the (merger, name change, or operator change) for all wells listed on Federal or Indian leases on: N/A

7. **Federal and Indian Units:** The BLM or BIA has approved the successor of unit operator for wells listed on: N/A

8. **Federal and Indian Communization Agreements ("CA"):** The BLM or the BIA has approved the operator change for all wells listed involved in a CA on: N/A

9. **Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject,** for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: N/A

DATA ENTRY:

1. Changes entered in the **Oil and Gas Database on:** 12/17/2001

2. Changes have been entered on the **Monthly Operator Change Spread Sheet on:** 12/17/2001

3. Bond information entered in RBDMS on: 12/11/2001

4. Fee wells attached to bond in RBDMS on: 12/17/2001

STATE BOND VERIFICATION:

1. State well(s) covered by Bond No.: N/A

INDIAN BOND VERIFICATION:

1. Indian well(s) covered by Bond No.: N/A

FEDERAL BOND VERIFICATION:

1. Federal well(s) covered by Bond No.: N/A

FEE WELLS - BOND VERIFICATION/LEASE INTEREST OWNER NOTIFICATION:

1. (R649-3-1) The **NEW** operator of any fee well(s) listed has furnished a bond: 103172911249

2. The **FORMER** operator has requested a release of liability from their bond on: N/A
   The Division sent response by letter on: N/A

3. (R649-2-10) The **FORMER** operator of the Fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: 12/19/2001

COMMENTS:

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER: FEE
6. IF INDIAN, ALLOTTEE OR TRIBE NAME: NA
7. UNIT or CA AGREEMENT NAME: ANSCHUTZ RANCH EAST
8. WELL NAME and NUMBER: ARE W30-13
9. API NUMBER: 4304330279
10. FIELD AND POOL, OR WILDCAT: ANSCHUTZ RANCH EAST

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER

2. NAME OF OPERATOR: BP AMERICA PRODUCTION COMPANY SUITE A

3. ADDRESS OF OPERATOR: 1013 CHEYENNE DR. CITY EVANSTON STATE WY ZIP 82930 PHONE NUMBER: (303) 423-5749

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 597 FSL x 382 FEL COUNTY: SUMMIT
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESE 25 4N 7E STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☑ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start:	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☑ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☐ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☐ OTHER:
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The ARE W30-13 is shut in and has not been plugged and abandoned due to potential for future downhole monitoring. BP's plan is to hold these wells in a Temporarily Abandoned status until this potential is verified or eliminated. Upon elimination of potential, the wells will be plugged and abandoned. As for mechanical integrity: These wells all have packers installed and casing pressure is monitored by our field personnel. The wellhead valves are also on a regular PM for greasing and testing.

Please call Kris Lee at 303-423-5749 or Clark Lawler at 307-783-2406 if you have questions.

COPY SENT TO OPERATOR
Date: 11-17-03
Initials: CHD

RECEIVED
MAR 2 7 2003
DIV. OF OIL, GAS & MINING

THIS SUNDRY IS BEING RETURNED; INSUFFICIENT DATA WAS SUBMITTED TO APPROVE THE REQUESTED ACTION (see attached sheet).

November 19, 2003
Utah Division of Oil, Gas and Mining

NAME (PLEASE PRINT) Kristina A.Lee TITLE Regulatory Specialist
SIGNATURE Kristina Lee DATE 3/17/2003

(This space for State use only)

(5/2000)

(See Instructions on Reverse Side)

INFORMATION REQUIRED TO EXTEND SI/TA OF WELL

Well Name and Number:	ARE W30-13
API Number:	43-043-30279
Operator:	Merit Energy Company
Reference Document:	Original Sundry dated March 17, 2003, received by DOGM on March 27, 2003

The well has been Shut-in/Temporarily Abandoned for *5 years 4 months*. Insufficient information was submitted to the Division to approve the referenced well for continued Shut-in or Temporary Abandonment (SI/TA). The following requirements of R649-3-36 have not been met with this request for SI/TA approval.

1. The length of time the well is expected to be SI/TA (R649-3-36-1.2), and
2. An explanation and supporting data if necessary, for showing the well has integrity, meaning that the casing, cement, equipment condition, static fluid level, pressure, existence or absence of Underground Sources of Drinking Water and other factors do not make the well a risk to public health and safety or the environment. (R649-3-36-1.3)

Submitting the information suggested below may help show well integrity and may help qualify your well for extended SI/TA. **Note: As of July 1, 2003, wells in violation of the SI/TA rule R649-3-36 may be subject to full cost bonding (R649-3-1-4.2, 4.3).**

1. Wellbore diagram and;
2. Copy of recent casing pressure test and/or;
3. Current pressures on the wellbore (tubing pressure, casing pressure, and casing/casing annuli pressure) showing wellbore has integrity and;
4. Fluid level in the wellbore and;
5. An explanation of how the submitted information proves integrity.

If the required information is not received within 30 days of the date of this notice, further actions may be initiated. If you have any questions concerning this matter, please contact me at (801) 538-5281.

Dustin K. Doucet
Petroleum Engineer

November 19, 2003
Date

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER:

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME: See Attached

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ OTHER See Attached

8. WELL NAME and NUMBER: See Attached

2. NAME OF OPERATOR: BP America Production Company

9. API NUMBER: Attached

3. ADDRESS OF OPERATOR: 501 WestLake Park Blv CITY Houston STATE TX ZIP 77079

PHONE NUMBER: (281) 366-2000

10. FIELD AND POOL, OR WILDCAT: See Attached

4. LOCATION OF WELL

FOOTAGES AT SURFACE: See Attached

COUNTY: See Attached

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☑ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start:	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☑ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☐ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☐ OTHER:
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

BP America Production Company, effective May 1, 2003, has transferred its interest in the attached list of properties to :

Merit Energy Company
13727 Noel Road, Suite 500
Dallas, TX 75240

Transfer of operations is effective July 1, 2003.

By Merit Energy Company

Name Fred N. Diem Title V.P.

Signature [signature] Date 7/1/03

BP America Production Company

NAME (PLEASE PRINT) David G. Peterson TITLE Attorney-In-Fact

SIGNATURE [signature] DATE 6/26/03

(This space for State use only)

RECEIVED
JUL 03 2003
DIV. OF OIL, GAS & MINING

(5/2000)

(See Instructions on Reverse Side)

BP OPERATED PROPERTIES TRANSFERRED TO MERIT ENERGY COMPANY

API Well Number	Operator	Well Name	Well Type	Well Status	Field Name	County Name	Location (Twp-Rng)	Section	Qtr/Qtr	Ft. NS	NS	Ft. EW	EW
43-043-30096-00-00	BP AMERICA PRODUCTION CO	ARE W16-14	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	16	NWSW	2137	S	686	W
43-043-30106-00-00	BP AMERICA PRODUCTION CO	ARE 34-2	Water Disposal	Active Well	ANSCHUTZ RANCH	SUMMIT	4N-7E	34	NWNW	1036	N	1100	W
43-043-30123-00-00	BP AMERICA PRODUCTION CO	ARE W20-08	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	20	SENE	2202	N	1592	E
43-043-30129-00-00	BP AMERICA PRODUCTION CO	ARE 29-04ST1	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	29	NWNW	627	N	435	W
43-043-30130-00-00	BP AMERICA PRODUCTION CO	ARE E21-14	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	21	NWSW	2365	S	200	W
43-043-30135-00-00	BP AMERICA PRODUCTION CO	ARE W21-04	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	21	NWNW	1063	N	401	W
43-043-30136-00-00	BP AMERICA PRODUCTION CO	ARE W29-02	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	29	NWNE	662	N	2460	E
43-043-30138-00-00	BP AMERICA PRODUCTION CO	ARE W16-06	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	16	SENE	1314	N	618	E
43-043-30139-00-00	BP AMERICA PRODUCTION CO	ISLAND RANCHING C-1	Water Disposal	Active Well	ANSCHUTZ RANCH	SUMMIT	4N-7E	26	SWSE	1324	S	1722	E
43-043-30143-00-00	BP AMERICA PRODUCTION CO	CHAMPLIN 372 AMOCO C 1	Gas Well	Shut_In	ANSCHUTZ RANCH	SUMMIT	4N-7E	23	NWNW	860	N	536	W
43-043-30145-00-00	BP AMERICA PRODUCTION CO	ARE W20-14	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	20	NWSW	1518	S	1283	W
43-043-30148-00-00	BP AMERICA PRODUCTION CO	ARE W20-16	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	20	SWSE	257	S	1640	E
43-043-30154-00-00	BP AMERICA PRODUCTION CO	ARE W29-12	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	29	NWSW	2204	S	22	W
43-043-30156-00-00	BP AMERICA PRODUCTION CO	ARE W30-16	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	30	NESE	1345	S	968	E
43-043-30157-00-00	BP AMERICA PRODUCTION CO	ARE W36-16	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	SUMMIT	4N-7E	36	SESE	890	S	447	E
43-043-30159-00-00	BP AMERICA PRODUCTION CO	ARE W20-06	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	20	NWNW	1291	N	936	W
43-043-30162-00-00	BP AMERICA PRODUCTION CO	ARE W32-04	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	32	NWNW	642	N	791	W
43-043-30164-00-00	BP AMERICA PRODUCTION CO	ARE W31-08	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	31	NWNE	468	N	2201	E
43-043-30165-00-00	BP AMERICA PRODUCTION CO	ARE W31-04E	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	31	NWNW	111	N	737	W
43-043-30167-00-00	BP AMERICA PRODUCTION CO	ARE W36-08	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	SUMMIT	4N-7E	36	SENE	1641	N	1183	E
43-043-30168-00-00	BP AMERICA PRODUCTION CO	CHAMPLIN 387 B1A	Gas Well	Shut_In	ANSCHUTZ RANCH	SUMMIT	3N-7E	9	SWNW	1837	N	1286	W
43-043-30170-00-00	BP AMERICA PRODUCTION CO	CHAMPLIN 372 D-1	Gas Well	Producing Well	ANSCHUTZ RANCH	SUMMIT	4N-7E	23	NESE	2170	S	680	E
43-043-30176-00-00	BP AMERICA PRODUCTION CO	ARE W17-16	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	17	NWSE	1765	S	1444	E
43-043-30183-00-00	BP AMERICA PRODUCTION CO	ARE W30-08	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	30	SENE	2109	N	665	E
43-043-30185-00-00	BP AMERICA PRODUCTION CO	ARE W30-14	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	30	SESW	1195	S	1405	W
43-043-30188-00-00	BP AMERICA PRODUCTION CO	ARE W01-06	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	SUMMIT	3N-7E	1	SENW	1777	N	1666	W
43-043-30190-00-00	BP AMERICA PRODUCTION CO	ARE W31-12	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	31	SWNW	1778	N	640	W
43-043-30204-00-00	BP AMERICA PRODUCTION CO	ARE W19-16	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	19	SWSE	1229	S	1350	E
43-043-30209-00-00	BP AMERICA PRODUCTION CO	ARE W01-02	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	SUMMIT	3N-7E	1	NENW	386	N	2013	W
43-043-30215-00-00	BP AMERICA PRODUCTION CO	ARE W30-10	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	30	NWSE	2230	S	2432	E
43-043-30216-00-00	BP AMERICA PRODUCTION CO	ARE W30-15	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	30	SESW	626	S	2848	E
43-043-30217-00-00	BP AMERICA PRODUCTION CO	ARE W31-06	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	31	SENW	1397	N	2181	W
43-043-30218-00-00	BP AMERICA PRODUCTION CO	ARE W30-02	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	30	NWNE	715	N	2182	E
43-043-30220-00-00	BP AMERICA PRODUCTION CO	ARE W20-12	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	20	NWSW	2531	S	7	W
43-043-30226-00-00	BP AMERICA PRODUCTION CO	ARE E28-06	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	28	SENW	1900	N	1652	W
43-043-30227-00-00	BP AMERICA PRODUCTION CO	ARE W36-10	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	SUMMIT	4N-7E	36	NESW	2315	S	3185	E
43-043-30228-00-00	BP AMERICA PRODUCTION CO	ARE W20-02	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	20	NWNE	319	N	2000	E
43-043-30229-00-00	BP AMERICA PRODUCTION CO	ARE W20-10	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	20	SENW	2560	N	2567	W
43-043-30231-00-00	BP AMERICA PRODUCTION CO	ARE W16-12	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	16	SWNW	2756	S	454	W
43-043-30238-00-00	BP AMERICA PRODUCTION CO	ARE W20-04	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	20	NWNW	702	N	414	W
43-043-30248-00-00	BP AMERICA PRODUCTION CO	ARE W30-12A	Gas Injection	Inactive Well	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	30	NWSW	1886	S	47	W
43-043-30250-00-00	BP AMERICA PRODUCTION CO	ARE W29-06A	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	29	SENW	1513	N	1548	W
43-043-30251-00-00	BP AMERICA PRODUCTION CO	ARE W29-14A	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	29	NWSW	1786	S	795	W
43-043-30255-00-00	BP AMERICA PRODUCTION CO	ARE W36-14	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	SUMMIT	4N-7E	36	SESW	901	S	1780	W
43-043-30257-00-00	BP AMERICA PRODUCTION CO	ARE E28-12	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	28	NWSW	1994	S	806	W
43-043-30265-00-00	BP AMERICA PRODUCTION CO	ARE W2-10	Gas Injection	Inactive Well	ANSCHUTZ RANCH EAST	SUMMIT	3N-7E	2	NWSE	1959	S	1463	E
43-043-30270-00-00	BP AMERICA PRODUCTION CO	ARE W01-04	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	SUMMIT	3N-7E	1	SWNW	697	N	465	W
43-043-30271-00-00	BP AMERICA PRODUCTION CO	ARE W01-12	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	SUMMIT	3N-7E	1	NWSW	2072	S	1669	W
43-043-30272-00-00	BP AMERICA PRODUCTION CO	ARE W19-08	Gas Injection	Inactive Well	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	19	SENE	2227	N	301	E

BP OPERATED PROPERTIES TRANSFERRED TO MERIT ENERGY COMPANY

43-043-30273-00-00	BP AMERICA PRODUCTION CO	ARE W30-06	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	30 SENW	2393 S	1645 W
43-043-30277-00-00	BP AMERICA PRODUCTION CO	ARE W11-1	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	SUMMIT	3N-7E	11 NENE	533 N	1486 E
43-043-30279-00-00	BP AMERICA PRODUCTION CO	ARE W30-13	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	SUMMIT	4N-7E	25 SESE	597 S	382 E
43-043-30280-00-00	BP AMERICA PRODUCTION CO	ARE W31-05	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	31 SWNW	2361 N	282 E
43-043-30283-00-00	BP AMERICA PRODUCTION CO	ARE W12-04	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	SUMMIT	3N-7E	2 SESE	373 S	865 E
43-043-30286-00-00	BP AMERICA PRODUCTION CO	ARE W20-09	Gas Well	Producing Well	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	20 SENE	2360 N	430 E
43-043-30291-00-00	BP AMERICA PRODUCTION CO	ARE W20-03	Gas Well	Shut_In	ANSCHUTZ RANCH EAST	SUMMIT	4N-8E	20 SESW	641 S	1810 W

Division of Oil, Gas and Mining

OPERATOR CHANGE WORKSHEET

ROUTING
1. GLH
2. CDW
3. FILE

X **Change of Operator (Well Sold)** — **Designation of Agent/Operator**

Operator Name Change — Merger

The operator of the well(s) listed below has changed, effective: **7/1/2003**

FROM: (Old Operator):	**TO:** (New Operator):
N1990-BP America Production Company 501 WestLake Park Blvd Houston, TX 77079 Phone: (281) 366-2000	N4900-Merit Energy Company 13727 Noel Road, Suite 500 Dallas, TX 75240 Phone: (972) 628-1558

CA No. **Unit:** **ANSCHUTZ RANCH EAST**

WELL(S)

NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
ARE W01-12	01	030N	070E	4304330271	4540	FEE	GW	S
ARE W12-04	02	030N	070E	4304330283	4540	FEE	GW	P
ARE W11-1	11	030N	070E	4304330277	4540	FEE	GW	S
ARE W30-13	25	040N	070E	4304330279	4540	FEE	GW	S
ARE W19-08	19	040N	080E	4304330272	99990	FEE	GI	I
ARE W20-09	20	040N	080E	4304330286	4540	FEE	GW	P
ARE W20-03	20	040N	080E	4304330291	4540	FEE	GW	S
ARE W30-06	30	040N	080E	4304330273	4540	FEE	GW	S
ARE W31-05	31	040N	080E	4304330280	4540	FEE	GW	P

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 7/3/2003
2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 7/3/2003
3. The new company was checked on the **Department of Commerce, Division of Corporations Database on:** 8/7/2003
4. Is the new operator registered in the State of Utah: YES Business Number: 1348145-0143
5. If NO, the operator was contacted contacted on: _____

6. (R649-9-2)Waste Management Plan has been received on: IN PLACE

7. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: n/a

8. **Federal and Indian Units:**
The BLM or BIA has approved the successor of unit operator for wells listed on: n/a

9. **Federal and Indian Communization Agreements ("CA"):**
The BLM or BIA has approved the operator for all wells listed within a CA on: n/a

10. **Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject,** for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: ***

DATA ENTRY:

1. Changes entered in the **Oil and Gas Database on:** 8/26/2003
2. Changes have been entered on the **Monthly Operator Change Spread Sheet on:** 8/26/2003
3. Bond information entered in RBDMS on: 8/26/2003
4. Fee wells attached to bond in RBDMS on: 8/26/2003

STATE WELL(S) BOND VERIFICATION:

1. State well(s) covered by Bond Number: n/a

FEDERAL WELL(S) BOND VERIFICATION:

1. Federal well(s) covered by Bond Number: n/a

INDIAN WELL(S) BOND VERIFICATION:

1. Indian well(s) covered by Bond Number: n/a

FEE WELL(S) BOND VERIFICATION:

1. (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number 103912218
2. The **FORMER** operator has requested a release of liability from their bond on: n/a
The Division sent response by letter on: n/a

LEASE INTEREST OWNER NOTIFICATION:

3. (R649-2-10) The **FORMER** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: 8/26/2003

COMMENTS:

State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114-5801
(801) 538-5340 telephone
(801) 359-3940 fax
(801) 538-7223 TTY
www.nr.utah.gov

Michael O. Leavitt
Governor

Robert L. Morgan
Executive Director

Lowell P. Braxton
Division Director

August 26, 2003

Bruce Williams
BP America Production Company
501 WestLake Park Blvd
Houston, TX 77079

Subject: Notification of Sale or Transfer of Fee Lease Interest

Dear Mr. Williams:

The Division has processed your request for an operator change from BP America Production Company to Merit Energy Company effective July 1, 2003 for the attached list of fee wells.

Utah Administrative Code Rule R649-2-10 states: "The owner of a lease shall provide notification to any person with an interest in such lease, when all or part of that interest in the lease is sold or transferred".

This letter is written to advise you of your responsibility to notify all individuals with an interest in these leases (royalty interest and working interest) of the changer. Please provide written documentation of this notification to:

Utah Royalty Owners Association
PO Box 1292
Roosevelt, Utah 84066

Your assistance in this matter is appreciated.

Sincerely,

Earlene Russell

Earlene Russell
Engineering Technician

Attachment

cc: Merit Energy Company
Utah Royalty Owners Association

Well File
43-043-30279

State of Utah

Department of
Natural Resources

Division of
Oil, Gas & Mining

ROBERT L. MORGAN
Executive Director

LOWELL P. BRAXTON
Division Director

MICHAEL O. LEAVITT
Governor

OLENE S. WALKER
Lieutenant Governor

January 22, 2004

CERTIFIED MAIL #7002 0510 0003 8602 4798

Lance Taylor
Merit Energy Company
13727 Noel Road, Suite 500
Dallas, TX 75240-7312

Re: Extended Shut-in and Temporary Abandoned Well Requirements for Fee or State Leases.

Dear Mr. Taylor:

Merit Energy Company, as of January 2004, has twenty-four (24) Fee Lease Wells (see attachment A) that are currently in non-compliance for extended shut-in or temporary abandonment status. This includes twenty (20) Fee Lease Wells with returned Sundry Notices and attached requirement sheet dated November 19, 2003. Wells SI/TA beyond twelve (12) consecutive months requires filing a Sundry Notice (R649-3-36-1). Wells with five (5) years non-activity or non-productivity shall be plugged, unless the Division grants approval for extended shut-in time upon a showing of good cause by the operator (649-3-36-1.3.3). For extended SI/TA consideration the operator shall provide the Utah Division of Oil, Gas & Mining with the following:

1. Reasons for SI/TA of the well (R649-3-36-1.1).
2. The length of time the well is expected to be SI/TA (R649-3-36-1.2), and
3. An explanation and supporting data if necessary, for showing the well has integrity, meaning that the casing, cement, equipment condition, static fluid level, pressure, existence or absence of Underground Sources of Drinking Water and other factors do not make the well a risk to public health and safety or the environment (R649-3-36-1.3).

Submitting the information suggested below may help show well integrity and may help qualify your well for extended SI/TA. **Note: As of July 1, 2003, wells in violation of the SI/TA rule R649-3-36 may be subject to full cost bonding (R649-3-1-4.2, 4.3).**

1. Wellbore diagram, and
2. Copy of recent casing pressure test, and
3. Current pressures on the wellbore (tubing pressure, casing pressure, and casing/casing annuli pressure) showing wellbore has integrity, and
4. Fluid level in the wellbore, and
5. An explanation of how the submitted information proves integrity.

If the required information is not received within 30 days of the date of this notice, further actions may be initiated. If you have any questions concerning this matter, please contact me at (801) 538-5281.

Sincerely,

Dustin K. Doucet
Petroleum Engineer

jc
cc: John Baza
Well File

	Well Name	API	Lease Type	Years Inactive
1	ARE W20-06	43-043-30159	Fee	1 Year 2 Months
2	ARE W31-04E	43-043-30165	Fee	1 Year 3 Months
3	ARE W36-10	43-043-30227	Fee	1 Year 3 Months
4	ARE W36-08	43-043-30167	Fee	1 Year 7 Months

Wells with returned Sundry Notices and attached requirement sheet dated November 19, 2003

1	ARE W21-04	43-043-30135	Fee	1 Year 10 Months
2	Champlin 372 Amoco C1	43-043-30143	Fee	1 Year 11 Months
3	ARE W16-06	43-043-30138	Fee	1 Year 11 Months
4	ARE W01-12	43-043-30271	Fee	2 Years 4 Months
5	ARE W30-02	43-043-30218	Fee	3 Years 2 Months
6	ARE W36-14	43-043-30255	Fee	4 Years 5 Months
7	ARE W30-06	43-043-30273	Fee	5 Years 4 Months
8	ARE W20-02	43-043-30228	Fee	5 Years 4 Months
9	ARE W30-13	43-043-30279	Fee	5 Years 6 Months
10	ARE W19-16	43-043-30204	Fee	5 Years 8 Months
11	ARE W20-4	43-043-30238	Fee	6 Years 3 Months
12	ARE W31-12	43-043-30190	Fee	7 Years 3 Months
13	ARE W01-04	43-043-30270	Fee	7 Years 4 Months
14	ARE W11-01	43-043-30277	Fee	7 Years 4 Months
15	ARE W20-03	43-043-30291	Fee	8 Years 1 Month
16	ARE W16-14	43-043-30096	Fee	8 Years 1 Month
17	ARE 16-12	43-043-30231	Fee	8 Years 3 Months
18	Champlin 387 B1A	43-043-30168	Fee	8 Years 6 Months
19	ARE W17-16	43-043-30176	Fee	8 Years 7 Months
20	ARE E21-14	43-043-30130	Fee	10 Years 8 Months

Attachment A

Cint

State of Utah

Department of
Natural Resources

Division of
Oil, Gas & Mining

ROBERT L. MORGAN
Executive Director

LOWELL P. BRAXTON
Division Director

MICHAEL O. LEAVITT
Governor

OLENE S. WALKER
Lieutenant Governor

January 22, 2004

CERTIFIED MAIL #7002 0510 0003 8602 4798

Lance Taylor
Merit Energy Company
13727 Noel Road, Suite 500
Dallas, TX 75240-7312

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3. An explanation and supporting data if necessary, for showing the well has integrity, meaning that the casing, cement, equipment condition, static fluid level, pressure, existence or absence of Underground Sources of Drinking Water and other factors do not make the well a risk to public health and safety or the environment (R649-3-36-1.3).

1594 West North Temple, Suite 1210, PO Box 145801, Salt Lake City, UT 84114-5801
telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7223 • *www.ogm.utah.gov*

Utah!
Where ideas connect

Submitting the information suggested below may help show well integrity and may help qualify your well for extended SI/TA. **Note: As of July 1, 2003, wells in violation of the SI/TA rule R649-3-36 may be subject to full cost bonding (R649-3-1-4.2, 4.3).**

1. Wellbore diagram, and
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Sincerely,

Dustin K. Doucet
Petroleum Engineer

jc
cc: John Baza
Well File

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18	Champlin 387 B1A	43-043-30168	Fee	8 Years 6 Months
19	ARE W17-16	43-043-30176	Fee	8 Years 7 Months
20	ARE E21-14	43-043-30130	Fee	10 Years 8 Months

Attachment A

MERIT ENERGY COMPANY

13727 Noel Road, Suite 500
Dallas, TX 75240
Ph: 972-701-8377 **Fx:** 972-960-1252
www.meritenergy.com

Date: February 13, 2004

Subject: Extended Shut-in wells in the Anschutz Ranch East Field

Dear Mr. Doucet:

In response to your letter dated January 22, 2004, I would like to submit the attached supporting documentation regarding our extended shut-in wells. Merit Energy Company purchased an operating interest in the Anschutz Ranch East Unit from BP Production Company effective July 1, 2003, and has spent the last seven months evaluating the production capability of all active and inactive wells in the field. This process has resulted in workovers that have reestablished production in several of these wells, and revealed future opportunities for all of the others. Here is a quick synopsis of our plans for each well.

- **ARE W20-06-** Workover is planned to immediately reactive this well by running smaller tubing, and putting the well on gas lift. Should be reactivated by mid year 2004.
- **ARE W31-04-** BP attempted a directional reentry of this wellbore in 2001, during which time the drill pipe was inadvertently cemented in the horizontal section of the wellbore. Merit is investigating methods to effectively stimulate this wellbore and return it to production. If unable to do so, it will be plugged.
- **ARE W36-10-** This well will be the first test candidate for an experimental production method for artificial lifting gas wells. An electric submersible pump will be run in this well in the next couple of months in an attempt to reestablish production by removing large volumes of water from the formation. If this project is successful it could lead to the reactivation of virtually every inactive well in the field. The project is approved internally, and we are waiting on equipment and supplies before mobilizing a service rig.
- **ARE W36-08-** This well has been reactivated following a workover last fall. A sundry notice was filed and approved by the Utah Oil and Gas Commission.
- **ARE W21-04-** Surface tubing pressure indicates this well may be capable of producing again. However attempts to return this well to production with the current wellbore configuration have not been successful. Merit plans to install smaller tubing and gas lift on this well. If that is unsuccessful, this well is also a candidate for an electric submersible pump installation. If all attempts to reactivate the Nugget formation fail, this well is a recompletion candidate in the Twin Creek formation.
- **Champlin 372 C-1-** This well is capable of producing for a few days at a time, but quickly loads up with water and dies. Again, this well is a candidate for an electric submersible pump installation, or may be used as a salt water disposal well if additional capacity is needed due to the ESP program.
- **ARE W16-06-** This well will have an electric submersible pump installed if the program is successful. Otherwise it will be plugged.
- **ARE W01-12-** This well will have an electric submersible pump installed if the program is successful. It is also considered for an uphole recompletion.
- **ARE W30-02-** An attempt was made to return this well to production last fall, but was unsuccessful due to high water production. Pending the success of the W36-10, this well will also have an electric submersible pump installed.
- **ARE W36-14-** This well will have an electric submersible pump installed if the program is successful. It is also considered for an uphole recompletion.
- **ARE W30-06-** This well will have an electric submersible pump installed if the program is successful. It is also considered for an uphole recompletion.
- **ARE W20-02-** A workover has been approved internally to reactivate this well, and should begin in the next few weeks A sundry notice was filed and approved by the Utah Oil and Gas Commission.
- **ARE W30-13-** This well will have an electric submersible pump installed if the program is successful. It is also considered for an uphole recompletion.
- **ARE W19-16-** This well will have an electric submersible pump installed if the program is successful. It is also considered for an uphole recompletion.

RECEIVED
FEB 2 0 2004
DIV. OF OIL, GAS & MINING

- **ARE W20-04-** This well will have an electric submersible pump installed if the program is successful. It is also considered for an uphole recompletion.
- **ARE W31-12-** An attempt was made to reactivate this well in late 2003, but was unsuccessful. A sundry notice was filed and approved by the Utah Oil and Gas Commission. An uphole recompletion in the Twin Creek formation is planned and will be completed in the next few months.
- **ARE W01-04-** This well will have an electric submersible pump installed if the program is successful. It is also considered for an uphole recompletion.
- **ARE W11-01-** This well will have an electric submersible pump installed if the program is successful. Otherwise it will be plugged.
- **ARE W20-03-** This well will have an electric submersible pump installed if the program is successful. It is also considered for an uphole recompletion.
- **ARE W16-14-** This well will have an electric submersible pump installed if the program is successful. It is also considered for salt water disposal well if additional capacity is needed.
- **ARE W16-12-** This well will have an electric submersible pump installed if the program is successful. It is also considered for salt water disposal well if additional capacity is needed.
- **Champlin 387 B-1A-** Merit Energy is in the process of obtaining records from BP for this well. Once historical information is obtained, we will evaluate all feasible methods to return this well to producing status. Otherwise it will be plugged.
- **ARE W17-16-** This well will have an electric submersible pump installed if the program is successful. It is also considered for salt water disposal well if additional capacity is needed.
- **ARE E21-14-** This well was returned to producing status on 12/19/03.

In addition to this information, I have enclosed pressure data for all wells, and a wellbore schematic for all wells except the Champlin 387 B-1A. The static bottom hole pressures and static fluid levels were collected in September 2003 with bottom hole gauges. If you need any further information, please contact me at 972-628-1651 or electronically at lance.taylor@meritenergy.com.

Regards,

Lance L. Taylor
Operations Engineer

Cc: Rusty Ginnetti
Arlene Valliquette
Dennis Longwell

Attachments: (1) page of pressure data, (23) wellbore schematics

Return-path: <Lance.Taylor@meritenergy.com>
Received: from imail.meritenergy.com [208.133.141.18]
by UTSTDP13.state.ut.us; Tue, 24 Feb 2004 07:06:49 -0700
Subject: Anschutz Ranch East Unit
To: clintondworshak@utah.gov
Cc: Rusty Ginnetti <Rusty.Ginnetti@meritenergy.com>,
Arlene Valliquette <Arlene.Valliquette@meritenergy.com>,
Dennis Longwell <Dennis.Longwell@meritenergy.com>
X-Mailer: Lotus Notes Release 5.0.10 March 22, 2002
Message-ID: <OF2FAC50A1.BE12C251-ON86256E44.004B0584-86256E44.004D8670@meritenergy.com>
From: Lance Taylor <Lance.Taylor@meritenergy.com>
Date: Tue, 24 Feb 2004 08:06:46 -0600
X-MIMETrack: Serialize by Router on imail/Meritenergy(Release 6.0.3|September 26, 2003) at 02/24/2004 08:06:49 AM
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII

Mr. Dworshak,

I'd like to confirm our 2/23/04 telephone conversation in response to my letter dated 2/13/04 regarding extended shut in and temporarily abandoned wellbores in the Anschutz Ranch East Unit ("ARE Unit") of Summit county Utah. It is Merit Energy Company's intention to utilize each wellbore to it's full capacity. As such, Merit is in the process of attempting to reactivate the wellbores in question. Several wellbore specific workovers have been identified, and the approximate timing of each is mentioned in my original letter.

However, the majority of the reactivation work depends on the successful utilization of electric submersible pumps for artificial lift. It is the timing of this project that I would like to address. As you know, this is a capital intensive project, so Merit plans to do the appropriate research prior to implementation. Merit intends to test the idea on the ARE W36-10 within the next 8-12 weeks. Following a 4-12 week test period, Merit will perform a strenuous economic and operational evaluation. If it is determined that the project is valid, full scale implementation could begin as early as June. However, due to the complexity of the equipment, depth of the wells, and unavailability of service rigs, Merit anticipates this project will take several months, possibly one year, to complete. Due to the large volumes of water to be produced by this project, it is likely that one or more of the shut in wells will need to be reactivated as salt water disposal wells. All regulatory and state documentation will be completed prior to SWD conversion.

Finally, if the ESP project is unsuccessful, several of these wellbore have recompletion potential in shallower formations. Specifically, Merit has identified the Jurassic aged Twin Creek formation as a possible recompletion target. Completion practices must be researched and developed in order to ensure economic quantities of hydrocarbons. Again, all state and federal permits will be approved prior to project implementation.

If after all our efforts to economically reactivate these wells fail, Merit Energy will begin the plug and abandonment process. I trust this will clear up any issues of timing. If you have further questions or concerns please feel free to contact me at any of the numbers below.

Regards,

Lance L. Taylor
Operations Engineer-Rockies Region
Merit Energy Company
direct: 972-628-1651
fax: 972-701-0351
mobile: 972-998-9116
lance.taylor@meritenergy.com

State of Utah

Department of
Natural Resources

Division of
Oil, Gas & Mining

ROBERT L. MORGAN
Executive Director

LOWELL P. BRAXTON
Division Director

MICHAEL O. LEAVITT
Governor

OLENE S. WALKER
Lieutenant Governor

March 5, 2004

CERTIFIED RETURN RECEIPT NO. 7002 0510 0003 8602 4880

Mr. Lance Taylor
Merit Energy Company
13727 Noel Road, Suite 500
Dallas, TX 75240

Re: Extended Shut-in and Temporary Abandoned Well Requirements for Fee or State Leases dated January 22, 2004.

Dear Mr. Taylor,

The Division of Oil, Gas and Mining (DOGM) is in receipt of your letter dated February 13, 2004 in regards to the twenty-four (24) shut-in wells operated by Merit Energy Company (Merit). DOGM accepts Merit's plan of action to recomplete all twenty-four wells by year-end 2004. Many of the recompletions are dependent upon the success of electric submersible pumps; if this experimental procedure is not successful, keep the Division advised of any changes in Merit's plan of action. Based upon the plan of action and other information provided, DOGM approves the twenty-four (24) wells for extended shut-in until January 1, 2005. Please submit recompletion procedures and notice of intent sundries upon finalization.

For reference, Attachment A lists the wells subject to this request. If you have any questions or need additional assistance in regards to the above matters please contact me at (801) 538-5281.

Sincerely,

Dustin Doucet
Petroleum Engineer

1594 West North Temple, Suite 1210, PO Box 145801, Salt Lake City, UT 84114-5801
telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7223 • *www.ogm.utah.gov*

Utah!
Where ideas connect

	Well Name	API	Lease Type	Years Inactive
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2	ARE W31-04E	43-043-30165	Fee	1 Year 3 Months
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20	ARE E21-14	43-043-30130	Fee	10 Years 8 Months

Attachment A

MERIT ENERGY COMPANY

13727 Noel Road · Suite 500 · Dallas, Texas 75240
Ph 972.701.8377 · **Fx** 972.960.1252 · www.meritenergy.com

January 7, 2005

State of Utah – Department of Natural Resources
Division of Oil, Gas, & Mining
Attn: Mr. Dustin Doucet
PO Box 145801
Salt Lake City, UT 84114-5801

Dear Mr. Doucet:

This letter is in response to a telephone conversation that I had with Clint Dworshak on December 6, 2004. At that time, he requested that I provide information on Merit Energy Company's shut-in wells at Anschutz Ranch East, proving that the ground waters are protected.

Enclosed, please find a summary sheet, as well as wellbore diagrams for the subject wells.

If you have any questions or wish to discuss this further, please contact me at (972) 628-1550 or electronically at mike.mercer@meritenergy.com.

Sincerely,

Michael L. Mercer
Engineering

UTAH DOGM – SI WELL LIST

Wells to be Reactivated in 2005

- CHAMPLIN 372 C1
  - Packer at 8,320 (MD) 6,648 (TVD)
  - Top of cement (TOC) at 4,906
  - Tubing Pressure 1250#
  - Casing Pressure 0#
  - The 4-1/2" liner is cemented in place at 5090 (below the TOC). The tubing pressure and casing pressure are different. Therefore, the casing and tubing are not in communication and the ground waters are protected.
- ARE W16-06
  - Packer at 13,398
  - Top of cement (TOC) at 12,640
  - Tubing Pressure 0#
  - Casing Pressure 0#
  - The packer is located below the TOC. When Merit set the packer in October 2004, we pressure tested the annulus to 500 psi and it held. Therefore, the casing has integrity and the ground waters are protected.
- ARE W30-02
  - Packer at none
  - Top of cement (TOC) at 12,452
  - Tubing Pressure 0#
  - Casing Pressure 0#
  - Fluid Level 8200' from Surface
  - On 09/02/03, Merit ran a packer in this well and sat it at 13055' (below the TOC). The casing and packer were pressure tested to 1500 psi and held. The packer has since been removed and there is open-ended tubing in the well. However, the casing has integrity and the ground waters are protected.
- ARE W36-14
  - Packer at 13,988
  - Top of cement (TOC) at 13,700
  - Tubing Pressure 400#
  - Casing Pressure 0#
  - The packer is set below the TOC. The tubing pressure and casing pressure are different. Therefore, the casing and tubing are not in communication and the ground waters are protected.
- ARE W30-06
  - Packer at 13,450
  - Top of cement (TOC) at 11,200 (7" casing)
  - Tubing Pressure 0#
  - Casing Pressure 0#
  - The packer is set below the TOC. The 9-5/8" casing string has cement f/ 11911-7940. The 13-3/8" casing has cement f/ 5745-1200. With no pressure on the casing, and three strings of casing (7", 9-5/8", 13-3/8"), the ground waters are protected.
- ARE W30-13
  - Packer at 12,320
  - Top of cement (TOC) at 12,200
  - Tubing Pressure 300#
  - Casing Pressure 0#
  - The packer is set below the TOC. The tubing pressure and casing pressure are different. Therefore, the casing and tubing are not in communication and the ground waters are protected.

- ARE W31-12
  - Packer at none
  - Top of cement (TOC) at 10,700
  - Casing Pressure 100#
  - Fluid Level 1000' from Surface
  - There is not a packer or tubing in this well. The static fluid level is 1000' from surface. There is a 13-3/8" casing string set at 2846', a 9-5/8" casing string set at 10272', and a 7" tie-back casing string set at 9919'. These three casing strings are protecting the ground waters.

Wells with No Immediate Plans

- ARE W31-04
  - Packer at 14,000
  - Top of cement (TOC) at 11,900
  - Tubing Pressure 1100#
  - Casing Pressure 50#
  - This well is a horizontal sidetrack. The primary cement job on the original production casing had a TOC at 11,900. The kick-off point for the horizontal leg is below this depth. Additionally, the drill string was cemented in the horizontal section with the TOC estimated to be between 13126 and 13310. Based on the fact that the tubing and casing pressures are different, the two are not in communication and therefore, the ground waters are protected.
- ARE W01-12
  - Packer at 14,317
  - Top of cement (TOC) at 14,290
  - Tubing Pressure 300#
  - Casing Pressure 0#
  - The packer is located below the TOC. The tubing pressure and casing pressure are different. Therefore, the casing and tubing are not in communication and the ground waters are protected.
- ARE W19-16
  - Packer at 9,756
  - Top of cement (TOC) at unknown
  - Tubing Pressure 1000#
  - Casing Pressure 0#
  - The packer is located in the "Tie-Back" casing string. The tubing pressure and casing pressure are different. Therefore, the casing and tubing are not in communication and the ground waters are protected.
- ARE W20-04
  - Packer (PBR) at 10,489
  - Top of cement (TOC) at 9,415 (9-5/8" & 9-7/8" casing string)
  - Tubing Pressure 0#
  - Casing Pressure 0#
  - Fluid Level 9600' from Surface
  - The tubing is tied into the 5" liner with a polish bore receptacle (PBR) at 10,489. The TOC for the intermediate casing is above this point (at 9,415). The static fluid level is at 9600' (below the TOC), therefore, the ground waters are protected.
- ARE W01-04
  - Packer at 13,891
  - Top of cement (TOC) at 13,600
  - Tubing Pressure 1400#
  - Casing Pressure 100#
  - The packer is located below the TOC. The tubing pressure and casing pressure are different. Therefore, the casing and tubing are not in communication and the ground waters are protected.

UTAH DOGM – SI WELL LIST

- ARE W11-01
  - Packer at 12,733
  - Top of cement (TOC) at 12,100
  - Tubing Pressure 1500#
  - Casing Pressure 50#
  - The packer is located below the TOC. The tubing pressure and casing pressure are different. Therefore, the casing and tubing are not in communication and the ground waters are protected.
- ARE W20-03
  - Packer at 13,271
  - Top of cement (TOC) at 12,600
  - Tubing Pressure 1400#
  - Casing Pressure 75#
  - The packer is located below the TOC. The tubing pressure and casing pressure are different. Therefore, the casing and tubing are not in communication and the ground waters are protected.
- ARE W16-14
  - Packer (PBR) at 10,500
  - Top of cement (TOC) at 9,650 (9-5/8" casing)
  - Tubing Pressure 1500#
  - Casing Pressure 850#
  - The tubing is tied into the 4-1/2" liner with a PBR at 10,500. This is below the TOC for the 9-5/8" casing string. The tubing pressure and casing pressure are different. Therefore, the casing and tubing are not in communication and the ground waters are protected.
- ARE W16-12
  - Packer at 10,304
  - Top of cement (TOC) at 10,100 (9-5/8" casing)
  - Tubing Pressure 50#
  - Casing Pressure 0#
  - The packer is located below the TOC. The tubing pressure and casing pressure are different. Therefore, the casing and tubing are not in communication and the ground waters are protected.
- CHAMPLIN 387 B1A
  - Tubing Pressure 0#
  - Casing Pressure 0#
  - Fluid Level 5200' from surface
  - Merit has no wellfiles regarding this well. We are currently trying to obtain information on this well
- ARE W17-16
  - Packer (PBR) at 10,237
  - Top of cement (TOC) at 10,371 (7-5/8" casing)
  - Tubing Pressure 0#
  - Casing Pressure 0#
  - Fluid Level 8400' from Surface
  - The tubing is tied into the 5" liner with a PBR at 10,237. There is a 13-3/8" casing string set at 2526', a 9-5/8" casing string set at 10701', and a 7" tie-back casing string set at 10237'. These three casing strings are protecting the ground waters.

LEASE: ANSCHUTZ RANCH WELL: W30-13
OPERATOR: AMOCO
SEC: 25 TWP: 4N RGE: 7E

KB: 19"
DATE: 9/27/95
KB = FRM: 7868 TO: 7845'

" SA 121'

20" 94# H-40 STC
SA 302'

13 3/8" 61# & 72# BUTT
SA 5438'

9 5/8" 53.5# & 47# LTC
10 5/8" 101.4# P-110 X LINE
SA 12,248'

---FMC EXTEND NECK HANGER 3.5 VAM TOP & BTM
FRM: 19.00' TO: 19.50'

--146 JT'S 3.5" 12.7# N-80 NEW VAM
FRM: 19.50' TO: 4465.43' KB

---CAMCO KBUGM INJT MANDREL
FRM: 4465.43' TO: 4472.27' KB

--102 JT'S 3.5" 12.7# N-80 NEW VAM
FRM: 4472.27' TO: 7515.51' KB

---CAMCO KBUGM INJT MANDREL
FRM: 7515.51' TO: 7522.35' KB

---63 JT'S 3.5" 12.7# N-80 NEW VAM
FRM: 7522.35' TO: 9411.11' KB

---CAMCO KBUGM INJT MANDREL
FRM: 9411.11' TO: 9417.95' KB

---13 JT'S 3.5" 12.7# N-80 NEW VAM
FRM: 9417.95' TO: 9804.70, KB

---CAMCO KBUGM INJT MANDREL
FRM: 9804.70' TO: 9811.54' KB

---7 JT'S 3.5" 12.7# N-80 NEW VAM
FRM: 9811.54' TO: 10,023.11' KB

---CAMCO KBUGM INJT MANDREL
FRM: 10,020.11' TO: 10,027.52' KB

---76 JT'S 3.5" 12.7# N-80 NEW VAM
FRM: 10,027.52' TO: 12,317.47' KB

HES "R" NIPPLE 2.562" PROFILE
FRM: 12,318.57' TO: 12,319.81' KB

---X OVER, 3.5 8RD TO 3.5 VAM
FRM: 12,317.47' TO: 12,318.57' KB

--BAKER MODEL "R3" PROD PACKER
FRM: 12,319.81' TO: 12,328.03' KB

7" DV TOOL SA 12560'

---47 JT'S 3.5" 9.3# N-80 EUE 8RD TUBING
FRM: 12,328.03' TO: 13,774.14' KB

---HES "R" NIPPLE 2.562" PROFILE
FRM: 13,771.14' TO: 13,772.47' KB

1 JT 3.5" 9.3# N-80 EUE 8RD TUBING
FRM: 13,775.47' TO: 13,807.52' KB

---HES "RN" NIPPLE 2.562" PROFILE W/2.329" NO/GO
FRM: 13,807.52' TO: 13,808.83' KB

1 JT 3.5" 9.3# N-80 EUE 8RD WITH W/L RE-ENTRY GUIDE
FRM: 13,808.83' TO: 13,840.48'

EOT: 13,840.48' KB

PERFORATION'S

13953' - 972'	14002' - 100'
14180' - 280'	14296' - 320'
14354' - 406'	14452' - 468'
14474' - 496'	

32# L-80 BUTT (489')
26# N-80 BUTT (3141')
" 26# P-110 LTC (4403')
7" 32# N-80 LTC (6602')
SA 14635'

TD: 14,635'
7" CSG SET AT: 14,635'
PBTD: 14,497'

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Anschutz Ranch East Unit

	WELLS	API Number	Tubing Pressure	Casing Pressure	STATUS ON / OFF	Static BHP	Static Fluid Level
1	ARE# W20-06	43-043-30159	100	200	Shut In	1835	7500-9000'
2	ARE# W31-04E	43-043-30165	1200	0	Shut In	?	?
3	ARE# W36-10	43-043-30227	100	0	Shut In	3042	7500-9000'
4	ARE# W36-08	43-043-30167	100	100	Producing	2844	6000-7500'
Wells with returned Sundry Notices and attached requirement sheet dated November 19, 2003							
1	ARE# W21-04	43-043-30135	1850	450	Shut In	4130	12000'
2	Champlin 372 Amoco #C-1	43-043-30143	0	0	Shut In	?	?
3	ARE# W16-06	43-043-30138	0	0	Shut In	?	?
4	ARE# W01-12	43-043-30271	600	0	Shut In	4181	7500-9000'
5	ARE# W30-02	43-043-30218	0	0	Shut In	?	?
6	ARE# W36-14	43-043-30255	2200	1500	Shut In	3420	Perfs
7	ARE# W30-06	43-043-30273	0	0	Shut In	2397	6000-7500'
8	ARE# W20-02	43-043-30228	100	100	Shut In	?	?
9	ARE# W30-13	43-043-30279	900	0	Shut In	3030	7500-9000'
10	ARE# W19-16	43-043-30204	1400	0	Shut In	2645	Perfs
11	ARE# W20-04	43-043-30238	0	0	Shut In	?	?
12	ARE# W31-12	43-043-30190	20	450	Shut In	3494	4500-6000'
13	ARE# W01-04	43-043-30270			Shut In	4505	7500-9000'
14	ARE# W11-01	43-043-30277	1300	50	Shut In	4575	6000-7500'
15	ARE# W20-03	43-043-30291	1800	75	Shut In	3890	10500'
16	ARE# W16-14	43-043-30096	0	800	Shut In	4570	6000-7500'
17	ARE#16-12	43-043-30231	0	0	Shut In	4781	1500-3000'
18	Champlin 387 #B-1A	43-043-30168	0	0	Shut In	?	?
19	ARE# W17-16	43-043-30176	1100	0	Shut In	4734	3000-4500'
20	ARE# E21-14	43-043-30130	200	150	Producing	3926	Perfs

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Anschutz Ranch East Unit

	WELLS	API Number	Tubing Pressure	Casing Pressure	STATUS ON / OFF	Static BHP	Static Fluid Level
1	ARE# W20-06	43-043-30159	100	200	Shut In	1835	7500-9000'
2	ARE# W31-04E	43-043-30165	1200 1100	0 50	Shut In	?	?
3	ARE# W36-10	43-043-30227	100	0	Shut In	3042	7500-9000'
4	ARE# W36-08	43-043-30167	100	100	Producing	2844	6000-7500'
Wells with returned Sundry Notices and attached requirement sheet dated November 19, 2003							
1	ARE# W21-04	43-043-30135	1850	450	Shut In	4130	12000'
2	Champlin 372 Amoco #C-1	43-043-30143	1250 0	0 0	Perfs 6648' Shut In	?	?
3	ARE# W16-06	43-043-30138	0 0	0 0	Shut In	?	±2100' ?
4	ARE# W01-12	43-043-30271	600 300	0 0	Shut In	4181	7500-9000'
5	ARE# W30-02	43-043-30218	0 0	0 0 no packer	Shut In	?	8200' ?
6	ARE# W36-14	43-043-30255	2200 400	1500 0	Perfs 14,066 Shut In	3420	Perfs
7	ARE# W30-06	43-043-30273	0 0	0 0	Shut In	2397	6000-7500'
8	ARE# W20-02	43-043-30228	100	100	Shut In	?	?
9	ARE# W30-13	43-043-30279	900 300	0 0	Shut In	3030	7500-9000'
10	ARE# W19-16	43-043-30204	1400 1000	0 0	Shut In	2645	Perfs
11	ARE# W20-04	43-043-30238	0 0	0 0	Shut In	?	9600 ?
12	ARE# W31-12	43-043-30190	20 100	100 450 no packer	Shut In	3494	1000' 4500-6000'
13	ARE# W01-04	43-043-30270	1400	100	Shut In	4505	7500-9000'
14	ARE# W11-01	43-043-30277	1300 1500	50 50	Shut In	4575	6000-7500'
15	ARE# W20-03	43-043-30291	1800 1400	75 75	Shut In	3890	10500'
16	ARE# W16-14	43-043-30096	0 1500	800 850	Perfs 12816 Shut In	4570	6000-7500'
17	ARE#16-12	43-043-30231	0 50	0 0	Shut In	4781	1500-3000'
18	Champlin 387 #B-1A	43-043-30168	0 0	0 0	Shut In	?	5200 ?
19	ARE# W17-16	43-043-30176	1100 0	0 0	Perfs 13806' Shut In	4734	8400' 3000-4500'
20	ARE# E21-14	43-043-30130	200	150	Producing	3926	Perfs

Pressure Tested to 1000 psi, 1500 psi, 1000 psi
Pressure test to 500 psi 10/30/04
Pressure test to 1500 psi 9/2/03
1/14/04 Ran Cement Mapping Bond Tooled tubing

Champlin 372 → Pressure from 0 to 1250 psi (tubing) No FL Perfs @ 6648' BHP

ARE36-14 → Csg pressure from 1500 to 0, Tbg press from 2200 to 400 FL@14066' Perfs@14066' BHP=3420 psi (1432 psi surf) Grad=0.0867 psi/ft

ARE W16-14 → Tbg from 0 to 1500 psi, csg remained @ ±850 psi FL@ 6000', Perfs@12816 BHP=4570 psi Current FL @ ±9000' Grad = 0.565 psi/ft

ARE W17-16 → Tbg from 1100 to 0, FL from 4000' to 8400' FL@ 4000' Perfs@13806 BHP=4734 psi FLF@ 8400' Current @ FL 6000' Grad = 0.345 Grad = 0.315 psi/ft Grad = 0.690 psi/ft

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From: Mike Mercer <Mike.Mercer@meritenergy.com>
To: "Dustin Doucet" <dustindoucet@utah.gov>
Date: 4/7/2005 3:12:05 PM
Subject: Re: SI/TA integrity questions

On the W16-14, the production foreman did have to replace the gauge to get the new (correct) reading.

On the W17-16, the pressures and fluid levels were actually taken off of a swab report (they did not get "static" readings), which explains why the fluid level (and tubing pressure) was so much lower.

Hope this takes care of you, if not, please call.

Thanks

Michael L. Mercer
Engineering
Merit Energy Company
13727 Noel Road, Suite 500
Dallas, TX 75240
(972) 628-1550 Direct
(972) 960-1252 Fax

"Dustin Doucet" <dustindoucet@utah.gov>
03/11/2005 04:14 PM

To <Mike.Mercer@meritenergy.com>
cc
Subject Re: SI/TA integrity questions

Mike,

Thanks for the info. A couple more questions. On the 16-14 and 17-16 do you figure the readings or guages were incorrect last year or is their some other reason for the change in pressures?

Dustin

>>> Mike Mercer <Mike.Mercer@meritenergy.com> 03/11/05 1:48 PM >>>

Dustin,

Sorry it has taken me so long to get back with you...in response to your
email, most are easily explained...(see below in red)

Regarding the W30-14, we are installing ESPs on either side of this well,
we have a service company designing gas lift for this well and are
evaluating a reactivation following the ESP installations. If we do not
have the well reactivated in the next couple of months, I will provide you
with the wellbore diagram, pressures, and fluid level.

Let me know if you need anything else. Thanks

Michael L. Mercer
Engineering
Merit Energy Company
13727 Noel Road, Suite 500
Dallas, TX 75240
(972) 628-1550 Direct
(972) 960-1252 Fax

"Dustin Doucet"
<dustindoucet@uta
h.gov>

To <mike.mercer@meritenergy.com>

02/16/2005 04:04
PM

cc

Subject SI/TA integrity questions

Mike,

I finally looked at the packet you provided us at our January 10th meeting and had questions that you may be able to answer on four wells.
My questions deal with pressure and fluid level changes that I didn't have enough info to explain why they changed. Also, I want to give you
a heads up that another well came on to the SI/TA list this year. It is
the ARE W 30-14 (API 43-043-30185). A similar plan/integrity scenario will have to be followed on this well as we've done with the current SI/TA wells. The four wells that I had questions on are as follows:

Champlin 372 - Tbg pressure went from 0 last year to 1250 psi this year SWAB TESTED 2004

ARE W 36-14 - Tbg pressure went from 2200 to 400 psi, csg pressure went
from 1500 to 0 WE PULLED THE OLD PKR, RAN A TEST PKR, SWABBED TESTED, AND
RAN THE ESP (WE HAVE HAD PROBLEMS, BUT WE HAVE ESTABLISHED COMMERCIAL PRODUCTION)

ARE W 16-14 - Tbg pressure went from 0 to 1500 psi, csg pressure did stay constant at ~ 850psi which is probably good, although pressure on the backside doesn't make me feel all warm and fuzzy WE HAVE NOT DONE ANYTHING

ARE W 17-16 - Tbg pressure went from 1100 to 0 psi, FL went from 4000' to 8400' opposite of what you would expect hydrostatically based off of
the pressure change SWAB TESTED 2004 (FUTURE ESP INSTALLATION)

All in all I don't have a lot of concern for lack of integrity, but if you could provide me with some explanations as to why some of these changes occured on these 4 wells, I would appreciate it. The good news
is that you are reactivating two of the four wells this year.
Hopefully, this email makes some sense. Give me a call if you like and
we can discuss or respond via email. Thanks.

Dustin

Dustin Doucet
Petroleum Engineer

MERIT ENERGY COMPANY

13727 Noel Road · Suite 500 · Dallas, Texas 75240
Ph 972.701.8377 · Fx 972.960.1252 · www.meritenergy.com

November 10, 2004

State of Utah – Department of Natural Resources
Division of Oil, Gas, & Mining
Attn: Mr. Dustin Doucet
PO Box 145801
Salt Lake City, UT 84114-5801

Dear Mr. Doucet:

In a letter dated February 13, 2004, Merit Energy Company informed the DOGM of plans to reactivate twenty-four (24) shut-in wells. Based on this information, on March 5, 2004, the DOGM granted Merit a shut-in extension until January 1, 2005. In April, the engineer working the Anschutz Ranch East (Anschutz) field left Merit. He was replaced by a second engineer that left Merit in August. As a result of this turnover, there has been no continuity at Anschutz. Regretfully, Merit will not have these wells reactivated by January 1, 2005.

I took over as the Operations Engineer at Anschutz in August. On October 6, 2004, I called to discuss this situation with you. You requested that Merit submit a letter stating what work has been completed as well as our future plans.

The largest problem at Anschutz is water. Several wells have loaded up and died as a result of water production. Merit has been investigating several methods to remove the water and reestablish commercial gas production.

"Co-production"
As outlined in the February letter, Merit had plans to attempt "co-production" at Anschutz. "Co-production" is simply utilizing an electric submersible pump (ESP) to remove the water. Our first test candidate was the ARE W36-10. On July 15, 2004, we started the ESP. To date, results have been exceptional. The maximum gas rate that we have seen is 355 mcfd. This is more than enough to justify the cost of the installation. Average production has been 200 mcfd and 1200 bwpd.

The only drawback to "co-production" is installing power to location. Without knowing how the well will perform, Merit is hesitant to invest the capital upfront for power installation. Additionally, it took the power company approximately six months to perform the installation.

Although Merit is pleased with the results of "co-production", we have developed a new plan. We are currently preparing a generator to provide temporary power to location. Future installations will be performed on a temporary basis. If the well proves to be a success, an order for permanent power will be placed with the power company. This allows Merit the flexibility to test several shut-in wells without spending unnecessary capital.

We are currently in the process of preparing the ARE W16-06 for an ESP installation. Additional wells that are currently identified for potential ESP installations are the ARE W30-02, W30-06, W30-13, and W36-14. Merit anticipates having these wells tested during 2005. Further installations will be determined based on the success of the above mentioned wells.

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Capillary Strings

Merit has also begun utilizing capillary strings to inject soap downhole to assist the well in lifting the produced water. We currently have five (5) capillary strings in service at Anschutz and are planning on installing four (4) more before the end of the year.

Gas Lift

Although gas lift is not new to Anschutz, Merit has been trying to extend its capabilities. Our first hurdle regarding gas lift is obtaining additional lift gas capacity. We currently utilize sales gas for gas lift. Based on our current compression, we are limited to 4 mmcfd of lift gas. In addition to increasing our gas lift capability, Merit is exploring the idea of utilizing nitrogen for gas lift.

With that being said, we currently have seventeen wells capable of being gas lifted. Due to our limited lift gas capacity, only six (6) wells are currently being gas lifted.

Additionally, Merit is working with several service companies to explore ways to gas lift from below the packer. There are several wells at Anschutz that have one to two thousand feet of pay. As a result, conventional gas lift may or may not be effective. We have tried one method of gas lifting from below the packer and the results are great. However, this method is not a "cure-all". It will only work on select wells. We will continue to look for wells capable of being lifted in this manner. We are in the process of identifying a candidate to test another method of gas lifting from below the packer. As soon as the well is identified, the installation will be performed.

While Merit is still in the early phase of developing completion techniques to adequately produce the wells at Anschutz, we are making great progress. We have had to think "out-of-the-box" to come up with creative ways to remove the water and increase the gas and are exhausting all resources to improve production and reduce idle wellbores.

I have attached the February 13 letter as well as our current plans for the 24 wells.

If you have any questions or require additional information, please contact me at (972) 628-1550 or electronically at mike.mercer@meritenergy.com.

Sincerely,

Michael L. Mercer
Operations Engineering

MERIT ENERGY COMPANY

13727 Noel Road, Suite 500
Dallas, TX 75240
Ph: 972-701-8377 Fx: 972-960-1252
www.meritenergy.com

Date: February 13, 2004

Subject: Extended Shut-in wells in the Anschutz Ranch East Field

Dear Mr. Doucet:

In response to your letter dated January 22, 2004, I would like to submit the attached supporting documentation regarding our extended shut-in wells. Merit Energy Company purchased an operating interest in the Anschutz Ranch East Unit from BP Production Company effective July 1, 2003, and has spent the last seven months evaluating the production capability of all active and inactive wells in the field. This process has resulted in workovers that have reestablished production in several of these wells, and revealed future opportunities for all of the others. Here is a quick synopsis of our plans for each well.

- **ARE W20-06-** Workover is planned to immediately reactive this well by running smaller tubing, and putting the well on gas lift. Should be reactivated by mid year 2004.
- **ARE W31-04-** BP attempted a directional reentry of this wellbore in 2001, during which time the drill pipe was inadvertently cemented in the horizontal section of the wellbore. Merit is investigating methods to effectively stimulate this wellbore and return it to production. If unable to do so, it will be plugged.
- **ARE W36-10-** This well will be the first test candidate for an experimental production method for artificial lifting gas wells. An electric submersible pump will be run in this well in the next couple of months in an attempt to reestablish production by removing large volumes of water from the formation. If this project is successful it could lead to the reactivation of virtually every inactive well in the field. The project is approved internally, and we are waiting on equipment and supplies before mobilizing a service rig.
- **ARE W36-08-** This well has been reactivated following a workover last fall. A sundry notice was filed and approved by the Utah Oil and Gas Commission.
- **ARE W21-04-** Surface tubing pressure indicates this well may be capable of producing again. However attempts to return this well to production with the current wellbore configuration have not been successful. Merit plans to install smaller tubing and gas lift on this well. If that is unsuccessful, this well is also a candidate for an electric submersible pump installation. If all attempts to reactivate the Nugget formation fail, this well is a recompletion candidate in the Twin Creek formation.
- **Champlin 372 C-1-** This well is capable of producing for a few days at a time, but quickly loads up with water and dies. Again, this well is a candidate for an electric submersible pump installation, or may be used as a salt water disposal well if additional capacity is needed due to the ESP program.
- **ARE W16-06-** This well will have an electric submersible pump installed if the program is successful. Otherwise it will be plugged.
- **ARE W01-12-** This well will have an electric submersible pump installed if the program is successful. It is also considered for an uphole recompletion.
- **ARE W30-02-** An attempt was made to return this well to production last fall, but was unsuccessful due to high water production. Pending the success of the W36-10, this well will also have an electric submersible pump installed.
- **ARE W36-14-** This well will have an electric submersible pump installed if the program is successful. It is also considered for an uphole recompletion.
- **ARE W30-06-** This well will have an electric submersible pump installed if the program is successful. It is also considered for an uphole recompletion.
- **ARE W20-02-** A workover has been approved internally to reactivate this well, and should begin in the next few weeks A sundry notice was filed and approved by the Utah Oil and Gas Commission.
- **ARE W30-13-** This well will have an electric submersible pump installed if the program is successful. It is also considered for an uphole recompletion.
- **ARE W19-16-** This well will have an electric submersible pump installed if the program is successful. It is also considered for an uphole recompletion.

- **ARE W20-04-** This well will have an electric submersible pump installed if the program is successful. It is also considered for an uphole recompletion.
- **ARE W31-12-** An attempt was made to reactivate this well in late 2003, but was unsuccessful. A sundry notice was filed and approved by the Utah Oil and Gas Commission. An uphole recompletion in the Twin Creek formation is planned and will be completed in the next few months.
- **ARE W01-04-** This well will have an electric submersible pump installed if the program is successful. It is also considered for an uphole recompletion.
- **ARE W11-01-** This well will have an electric submersible pump installed if the program is successful. Otherwise it will be plugged.
- **ARE W20-03-** This well will have an electric submersible pump installed if the program is successful. It is also considered for an uphole recompletion.
- **ARE W16-14-** This well will have an electric submersible pump installed if the program is successful. It is also considered for salt water disposal well if additional capacity is needed.
- **ARE W16-12-** This well will have an electric submersible pump installed if the program is successful. It is also considered for salt water disposal well if additional capacity is needed.
- **Champlin 387 B-1A-** Merit Energy is in the process of obtaining records from BP for this well. Once historical information is obtained, we will evaluate all feasible methods to return this well to producing status. Otherwise it will be plugged.
- **ARE W17-16-** This well will have an electric submersible pump installed if the program is successful. It is also considered for salt water disposal well if additional capacity is needed.
- **ARE E21-14-** This well was returned to producing status on 12/19/03.

In addition to this information, I have enclosed pressure data for all wells, and a wellbore schematic for all wells except the Champlin 387 B-1A. The static bottom hole pressures and static fluid levels were collected in September 2003 with bottom hole gauges. If you need any further information, please contact me at 972-628-1651 or electronically at lance.taylor@meritenergy.com.

Regards,

Lance L. Taylor
Operations Engineer

Cc: Rusty Ginnetti
Arlene Valliquette
Dennis Longwell

Attachments: (1) page of pressure data, (23) wellbore schematics

	Well Name	API	Lease Type	Years Inactive
1	ARE W20-06	43-043-30159	Fee	1 Year 2 Months
2	ARE W31-04E	43-043-30165	Fee	1 Year 3 Months
3	ARE W36-10	43-043-30227	Fee	1 Year 3 Months
4	ARE W36-08	43-043-30167	Fee	1 Year 7 Months

Wells with returned Sundry Notices and attached requirement sheet dated November 19, 2003

1	ARE W21-04	43-043-30135	Fee	1 Year 10 Months
2	Champlin 372 Amoco C1	43-043-30143	Fee	1 Year 11 Months
3	ARE W16-06	43-043-30138	Fee	1 Year 11 Months
4	ARE W01-12	43-043-30271	Fee	2 Years 4 Months
5	ARE W30-02	43-043-30218	Fee	3 Years 2 Months
6	ARE W36-14	43-043-30255	Fee	4 Years 5 Months
7	ARE W30-06	43-043-30273	Fee	5 Years 4 Months
8	ARE W20-02	43-043-30228	Fee	5 Years 4 Months
9	ARE W30-13	43-043-30279	Fee	5 Years 6 Months
10	ARE W19-16	43-043-30204	Fee	5 Years 8 Months
11	ARE W20-4	43-043-30238	Fee	6 Years 3 Months
12	ARE W31-12	43-043-30190	Fee	7 Years 3 Months
13	ARE W01-04	43-043-30270	Fee	7 Years 4 Months
14	ARE W11-01	43-043-30277	Fee	7 Years 4 Months
15	ARE W20-03	43-043-30291	Fee	8 Years 1 Month
16	ARE W16-14	43-043-30096	Fee	8 Years 1 Month
17	ARE 16-12	43-043-30231	Fee	8 Years 3 Months
18	Champlin 387 B1A	43-043-30168	Fee	8 Years 6 Months
19	ARE W17-16	43-043-30176	Fee	8 Years 7 Months
20	ARE E21-14	43-043-30130	Fee	10 Years 8 Months

Attachment A

UTAH DOGM – SI WELL LIST

- **ARE W20-06** – worked over in 2004, selectively swab tested individual zones. Installed gas lift (GL) equipment. Currently intermittently producing when lift gas is available.
- **ARE W31-04** – no immediate plans, will evaluate for reactivation.
- **ARE W36-10** – installed ESP. The well is producing.
- **ARE W36-08** – the well was reactivated in the fall of 2003. A capillary string was installed in September 2004. The well is producing.
- **ARE W21-04** – worked over in 2004. Installed GL equipment. Currently intermittently producing when lift gas is available.
- **CHAMPLIN 372 C1** – swabbed in October 2004. Swab results were encouraging. There are no production facilities or flowlines in place. We are in the process of purchasing a gas testing unit. Once the unit is in our possession, we will flow test this well and evaluate the economics of installing surface facilities.
- **ARE W16-06** – swabbed in November 2004. Currently sizing ESP and reconditioning generator for test. Anticipate having ESP running by end of the year.
- **ARE W01-12** – no immediate plans, will evaluate for reactivation.
- **ARE W30-02** – plan to install ESP in 2005 for test.
- **ARE W36-14** – plan to install ESP in 2005 for test.
- **ARE W30-06** – plan to install ESP in 2005 for test.
- **ARE W20-02** – worked over in 2004. Installed GL equipment. Currently intermittently producing when lift gas is available.
- **ARE W30-13** – plan to install ESP in 2005 for test.
- **ARE W19-16** – no immediate plans, will evaluate for reactivation.
- **ARE W20-04** – no immediate plans, will evaluate for reactivation.
- **ARE W31-12** – plan to test the Nugget, if unsuccessful, will attempt a Twin Creek completion.
- **ARE W01-04** – no immediate plans, will evaluate for reactivation.
- **ARE W11-01** – no immediate plans, will evaluate for reactivation.
- **ARE W20-03** – no immediate plans, will evaluate for reactivation.
- **ARE W16-14** – no immediate plans, will evaluate for reactivation.
- **ARE W16-12** – no immediate plans, will evaluate for reactivation.
- **CHAMPLIN 387 B1A** – no immediate plans, will evaluate for reactivation.
- **ARE W17-16** – no immediate plans, will evaluate for reactivation.
- **ARE E21-14** – the well was reactivated in December 2003. The well is producing.

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

State of Utah

Department of Natural Resources

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas & Mining

MARY ANN WRIGHT
Acting Division Director

April 8, 2005

Merit Energy Company
Attn: Michael L. Mercer
13727 Noel Road, Suite 500
Dallas, Texas 75240

Re: Approval for Extension of Shut-in or Temporarily Abandoned Status for Wells on Fee or State Leases

Dear Mr. Mercer:

The Division of Oil, Gas and Mining (the "Division") is in receipt of your letters dated November 10, 2004 (received by the Division on November 12, 2004) and January 7, 2005 (received by the Division on January 10, 2005) in regards to the twenty-four (24) shut-in wells operated by Merit Energy Company ("Merit"). The Division understands that six of these wells were put back into production in 2004. Merit's original plan was to return all twenty-four wells to production in 2004. Because of power restrictions, etc., Merit was unable to achieve that target. It is now the Division's understanding that Merit plans to return seven more wells to production in 2005 by installing an ESP. The Division understands that Merit is also investigating other methods to assist in lifting the water (e.g. capillary strings). Depending on the success of the wells with ESP's installed, the wells currently on Gas Lift, and the success of the other methods, the remaining 11 wells will either be plugged or put into production.

Based on the submitted information and plan of action, the Division approves your request for extended SI/TA for the eighteen (18) remaining SI/TA wells (see attachment A) until January 1, 2006. The operator should continue to monitor the wells by documenting pressures and fluid levels on a periodic basis. Any significant change in pressure or fluid level should be reported to the Division immediately. Remedial action may be necessary.

In addition to the twenty-four wells mentioned above, Merit also has one new well for 2005 that requires approval for extended SI/TA. The well is the ARE W30-14 (API # 43-043-30185). Our records indicate that this well has been SI/TA since February of 2003. Merit must submit their future plans for this well and information that demonstrates the well has integrity and is not a risk to public health and safety or the environment (R649-3-36-1.1 to 1.3).

The required information should be submitted to the Division within 30 days of the date of this letter or further actions may be initiated. If you have any questions or need additional assistance in regards to the above matters please contact me at (801) 538-5281.

Sincerely,

Dustin Doucet
Petroleum Engineer

DKD:jc
Attachment
cc: Well File

ATTACHMENT A

4N 7E 25

	Well Name	API	Lease Type	Years Inactive
1	ARE W31-04E	43-043-30165	Fee	2 Year 3 Months
2	Champlin 372 Amoco C 1	43-043-30143	Fee	2 Year 11 Months
3	ARE W16-06	43-043-30138	Fee	2 Year 11 Months
4	ARE W01-12	43-043-30271	Fee	3 Years 4 Months
5	ARE W30-02	43-043-30218	Fee	4 Years 2 Months
6	ARE W36-14	43-043-30255	Fee	5Years 5 Months
7	ARE W30-06	43-043-30273	Fee	6 Years 4 Months
8	ARE W30-13	43-043-30279	Fee	6 Years 6 Months
9	ARE W19-16	43-043-30204	Fee	6 Years 8 Months
10	ARE W20-04	43-043-30238	Fee	7 Years 3 Months
11	ARE W31-12	43-043-30190	Fee	8 Years 3 Months
12	ARE W01-04	43-043-30270	Fee	8 Years 4 Months
13	ARE W11-01	43-043-30277	Fee	8 Years 4 Months
14	ARE W20-03	43-043-30291	Fee	9 Years 1 Month
15	ARE W16-14	43-043-30096	Fee	9 Years 1 Month
16	ARE W16-12	43-043-30231	Fee	9 Years 3 Months
17	Champlin 387 B1A	43-043-30168	Fee	9 Years 6 Months
18	ARE W17-16	43-043-30176	Fee	9 Years 7 Months

FORM 9

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER: FEE
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT or CA AGREEMENT NAME: WYW109406X
8. WELL NAME and NUMBER: ARE W 30 13
9. API NUMBER: 4304330279
10. FIELD AND POOL, OR WILDCAT: Anschutz Ranch East

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER _____

2. NAME OF OPERATOR: Merit Energy Company

3. ADDRESS OF OPERATOR: 13727 Noel Road, Suite 500 CITY Dallas STATE TX ZIP 75240 PHONE NUMBER: (972) 628-1658

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 597' FSL & 382' FEL 6th P.M. COUNTY: Summit
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESE 25 T4N R7E STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start: _____	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☑ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
Date of work completion: 3/2/2006	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☑ OTHER: Installed Gas Lift
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Merit Energy Company installed gas lift on the aforementioned well on 3/02/2006.

CC: BLM - Utah

NAME (PLEASE PRINT) Michal Karam White TITLE Regulatory Anlayst

SIGNATURE _____ DATE 5/15/2009

(This space for State use only)

RECEIVED
MAY 19 2009
DIV. OF OIL, GAS & MINING

(5/2000) (See Instructions on Reverse Side)

Eastman Whipstock

REPORT of SUB-SURFACE DIRECTIONAL SURVEY

RECEIVED
OCT 14 1988
DIVISION OF
OIL, GAS & MINING

43-043-30279

AMOCO PRODUCTION COMPANY
COMPANY

4N 7E 25

ANSCHUTZ RANCH EAST W30-13
WELL NAME

SUMMIT COUNTY, UTAH
LOCATION

JOB NUMBER	TYPE OF SURVEY	DATE
410-0762	SEEKER	9-FEB-87

SURVEY BY
DENNY COY

OFFICE
ROCKY MOUNTAIN

FORM D-302 R2

EASTMAN CHRISTENSEN

RECORD OF SURVEY

FOR

```
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
*                                                                   *
* OPERATOR    : AMOCO PRODUCTION COMPANY                            *
*                                                                   *
* STRUCTURE   : ANSCHUTZ RANCH EAST FLD                             *
*                                                                   *
* WELL        : ARE W30-13            SLOT : 17                     *
*                                                                   *
* LOCATION    : UINTA COUNTY, WYOMING                               *
*                                                                   *
* JOB NUMBER  :                                                     *
*                                                                   *
* RIG         :                                                     *
*                                                                   *
* DECLINATION :    15.00 E                                          *
*                                                                   *
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
```

EC DISTRICT : ROCKY MOUNTAIN DIST.

AMOCO PRODUCTION COMPANY
ANSCHUTZ RANCH EAST FLD
UINTA COUNTY, WYOMING

SLOT : 17
WELL : ARE W30-13
DECLINATION : 15.00

DATE PRINTED : 11-FEB-87
OUR REF. NO. : S02800.8AM
JOB NUMBER :

MEASURED DEPTH	DRIFT ANGLE D M	DRIFT DIRECTION D M	COURSE LENGTH	TRUE VERTICAL DEPTH	RECTANGULAR COORDINATES		DOGLEG SEVERITY
0.00	0 0	N 0 0 E	0.00	0.00	0.00 N	0.00 E	0.00
100.00	0 16	S 86 56 W	100.00	100.00	0.01 S	0.23 W	0.27
200.00	0 41	S 81 47 W	100.00	200.00	0.09 S	1.06 W	0.42
300.00	0 35	S 87 55 W	100.00	299.99	0.19 S	2.16 W	0.11
400.00	0 37	S 76 5 W	100.00	399.98	0.34 S	3.20 W	0.13
500.00	0 53	S 86 56 W	100.00	499.98	0.53 S	4.50 W	0.[illegible]
600.00	1 19	N 84 34 W	100.00	599.96	0.49 S	6.41 W	0.46
700.00	1 31	N 85 13 W	100.00	699.93	0.27 S	8.87 W	0.21
800.00	1 37	S 89 11 W	100.00	799.89	0.18 S	11.61 W	0.18
900.00	1 48	S 79 37 W	100.00	899.84	0.47 S	14.57 W	0.34
1000.00	1 58	S 77 16 W	100.00	999.79	1.13 S	17.79 W	0.19
1100.00	1 56	S 74 24 W	100.00	1099.73	1.96 S	21.09 W	0.10
1200.00	1 56	S 68 13 W	100.00	1199.68	3.04 S	24.29 W	0.21
1300.00	2 7	S 67 17 W	100.00	1299.61	4.38 S	27.56 W	0.18
1400.00	2 11	S 64 52 W	100.00	1399.54	5.90 S	30.99 W	0.12
1500.00	2 14	S 68 27 W	100.00	1499.47	7.43 S	34.53 W	0.15
1600.00	2 1	S 62 18 W	100.00	1599.40	8.98 S	37.90 W	0.32
1700.00	1 50	S 48 19 W	100.00	1699.34	10.88 S	40.65 W	0.50
1800.00	1 53	S 47 22 W	100.00	1799.29	13.06 S	43.05 W	0.[illegible]
1900.00	1 43	S 52 16 W	100.00	1899.24	15.08 S	45.45 W	0.[illegible]
2000.00	1 42	S 64 21 W	100.00	1999.20	16.65 S	48.00 W	0.36
2100.00	1 43	S 70 16 W	100.00	2099.15	17.81 S	50.77 W	0.19
2200.00	1 36	S 69 51 W	100.00	2199.11	18.80 S	53.49 W	0.11
2300.00	1 47	S 65 14 W	100.00	2299.07	19.93 S	56.22 W	0.23
2400.00	1 49	S 59 46 W	100.00	2399.02	21.38 S	59.02 W	0.17
2500.00	1 54	S 61 48 W	100.00	2498.97	22.97 S	61.85 W	0.10
2600.00	2 1	S 56 11 W	100.00	2598.91	24.73 S	64.77 W	0.22
2700.00	2 1	S 54 19 W	100.00	2698.84	26.71 S	67.64 W	0.07
2800.00	2 8	S 58 5 W	100.00	2798.78	28.73 S	70.65 W	0.18
2900.00	2 14	S 57 26 W	100.00	2898.71	30.77 S	73.89 W	0.10

CONTINUED ON NEXT PAGE ...

AMOCO PRODUCTION COMPANY
ANSCHUTZ RANCH EAST FLD
UINTA COUNTY, WYOMING

SLOT : 17
WELL : ARE W30-13
DECLINATION : 15.00

DATE PRINTED : 11-FEB-87
OUR REF. NO. : S02300.8AM
JOB NUMBER :

MEASURED DEPTH	DRIFT ANGLE D M	DRIFT DIRECTION D M	COURSE LENGTH	TRUE VERTICAL DEPTH	RECTANGULAR COORDINATES		DOGLEG SEVERITY
3000.00	2 24	S 58 17 W	100.00	2998.62	32.92 S	77.31 W	0.16
3100.00	2 34	S 56 37 W	100.00	3098.53	35.25 S	80.97 W	0.18
3200.00	2 39	S 58 38 W	100.00	3198.43	37.69 S	84.81 W	0.12
3300.00	2 33	S 61 1 W	100.00	3298.32	39.97 S	88.73 W	0.15
3400.00	2 7	S 59 56 W	100.00	3398.24	41.98 S	92.28 W	0.43
3500.00	1 47	S 58 38 W	100.00	3498.18	43.72 S	95.21 W	0.[illegible]
3600.00	1 38	S 69 47 W	100.00	3598.14	45.02 S	97.89 W	0.37
3700.00	1 21	S 74 23 W	100.00	3698.10	45.82 S	100.37 W	0.30
3800.00	1 8	S 75 48 W	100.00	3798.08	46.38 S	102.46 W	0.21
3900.00	0 51	S 84 48 W	100.00	3898.06	46.67 S	104.17 W	0.33
4000.00	1 5	N 82 58 W	100.00	3998.05	46.64 S	105.85 W	0.31
4100.00	1 3	N 72 36 W	100.00	4098.03	46.25 S	107.68 W	0.19
4200.00	0 58	N 84 40 W	100.00	4198.02	45.90 S	109.39 W	0.23
4300.00	0 59	N 78 23 W	100.00	4298.00	45.66 S	111.01 W	0.11
4400.00	1 8	N 86 17 W	100.00	4397.99	45.41 S	112.85 W	0.22
4500.00	1 29	N 87 34 W	100.00	4497.96	45.29 S	115.14 W	0.35
4600.00	1 37	N 80 24 W	100.00	4597.92	45.01 S	117.84 W	0.23
4700.00	1 47	N 79 39 W	100.00	4697.88	44.49 S	120.76 W	0.16
4800.00	1 37	N 82 5 W	100.00	4797.84	44.02 S	123.68 W	0.19
4900.00	1 42	N 81 58 W	100.00	4897.79	43.62 S	126.54 W	0.[illegible]
5000.00	1 13	N 88 5 W	100.00	4997.76	43.40 S	129.07 W	0.50
5100.00	1 5	S 85 8 W	100.00	5097.74	43.45 S	131.08 W	0.20
5200.00	0 51	N 88 50 W	100.00	5197.73	43.51 S	132.76 W	0.25
5300.00	0 35	N 82 31 W	100.00	5297.72	43.42 S	134.01 W	0.28
5400.00	0 20	N 57 24 W	100.00	5397.72	43.15 S	134.75 W	0.31
5500.00	0 16	N 69 43 W	100.00	5497.71	42.92 S	135.21 W	0.0[illegible]
5700.00	0 24	N 69 14 E	200.00	5697.71	42.01 S	135.21 W	0.31
5800.00	0 42	N 71 58 E	100.00	5797.71	41.69 S	134.30 W	0.30
5900.00	0 58	N 71 54 E	100.00	5897.70	41.24 S	132.92 W	0.26
6000.00	1 18	N 75 55 E	100.00	5997.68	40.70 S	131.02 W	0.35

CONTINUED ON NEXT PAGE ...

MEASURED DEPTH	DRIFT ANGLE D M	DRIFT DIRECTION D M	COURSE LENGTH	TRUE VERTICAL DEPTH	RECTANGULAR COORDINATES		DOGLEG SEVERITY
6100.00	1 27	N 79 0 E	100.00	6097.65	40.17 S	128.67 W	0.16
6200.00	1 51	N 82 5 E	100.00	6197.60	39.70 S	125.85 W	0.41
6300.00	1 54	N 80 5 E	100.00	6297.55	39.20 S	122.62 W	0.08
6400.00	2 0	N 77 14 E	100.00	6397.49	38.53 S	119.28 W	0.15
6500.00	2 1	N 64 53 E	100.00	6497.43	37.43 S	116.10 W	0.43
6600.00	1 31	N 62 14 E	100.00	6597.39	36.06 S	113.34 W	0.[illegible]
6700.00	1 20	N 45 6 E	100.00	6697.35	34.59 S	111.34 W	0.46
6800.00	1 19	N 39 1 E	100.00	6797.33	32.87 S	109.79 W	0.14
6900.00	1 8	N 29 18 E	100.00	6897.30	31.10 S	108.59 W	0.28
7000.00	1 11	N 16 16 E	100.00	6997.28	29.24 S	107.80 W	0.27
7100.00	1 21	N 5 47 E	100.00	7097.26	27.07 S	107.38 W	0.28
7200.00	1 22	N 2 24 E	100.00	7197.23	24.70 S	107.21 W	0.08
7300.00	1 24	N 0 32 E	100.00	7297.20	22.30 S	107.15 W	0.05
7400.00	1 20	N 1 36 W	100.00	7397.17	19.93 S	107.17 W	0.08
7500.00	1 24	N 4 36 W	100.00	7497.15	17.55 S	107.30 W	0.11
7600.00	1 30	N 6 44 W	100.00	7597.11	15.03 S	107.55 W	0.10
7700.00	1 35	N 13 52 W	100.00	7697.08	12.40 S	108.03 W	0.21
7800.00	1 31	N 14 57 W	100.00	7797.04	9.79 S	108.70 W	0.07
7900.00	1 29	N 7 29 W	100.00	7897.01	7.23 S	109.21 W	0.[illegible]
8000.00	1 37	N 3 34 W	100.00	7996.97	4.55 S	109.47 W	0.[illegible]
8100.00	1 50	N 10 46 W	100.00	8096.93	1.56 S	109.84 W	0.31
8200.00	1 56	N 11 43 W	100.00	8196.87	1.66 N	110.48 W	0.09
8300.00	2 3	N 15 53 W	100.00	8296.81	5.04 N	111.31 W	0.19
8400.00	3 0	N 11 24 W	100.00	8396.71	9.33 N	112.35 W	0.98
8500.00	4 7	N 10 10 W	100.00	8496.52	15.44 N	113.52 W	1.12
8600.00	5 23	N 10 51 W	100.00	8596.17	23.58 N	115.03 W	1.27
8700.00	6 32	N 9 28 W	100.00	8695.63	33.80 N	116.86 W	1.15
8800.00	7 24	N 7 3 W	100.00	8794.89	45.81 N	118.60 W	0.92
8900.00	6 46	N 4 59 W	100.00	8894.13	58.08 N	119.90 W	0.68
9000.00	4 41	N 5 15 W	100.00	8993.62	68.01 N	120.79 W	2.10

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AMOCO PRODUCTION COMPANY
ANSCHUTZ RANCH EAST FLD
UINTA COUNTY, WYOMING

SLOT : 17
WELL : ARE W30-13
DECLINATION : 15.00

DATE PRINTED : 11-FEB-87
OUR REF. NO. : S02800.8AM
JOB NUMBER :

MEASURED DEPTH	DRIFT ANGLE D M	DRIFT DIRECTION D M	COURSE LENGTH	TRUE VERTICAL DEPTH	RECTANGULAR COORDINATES		DOGLEG SEVERITY
9100.00	1 30	N 34 9 E	100.00	9093.46	73.13 N	119.47 W	3.64
9200.00	2 43	S 66 26 E	100.00	9193.39	74.07 N	116.21 W	2.85
9300.00	5 11	S 47 5 E	100.00	9293.15	70.31 N	110.48 W	2.76
9400.00	7 0	S 43 14 E	100.00	9392.58	62.83 N	102.96 W	1.87
9500.00	7 35	S 45 13 E	100.00	9491.77	53.74 N	94.10 W	0.63
9600.00	8 44	S 47 2 E	100.00	9590.76	43.90 N	83.87 W	1.19
9700.00	9 37	S 48 13 E	100.00	9689.48	33.15 N	72.09 W	0.91
9800.00	9 57	S 51 35 E	100.00	9788.02	22.20 N	59.09 W	0.66
9900.00	10 2	S 54 1 E	100.00	9886.50	11.71 N	45.27 W	0.43
10000.00	9 59	S 56 3 E	100.00	9984.98	1.76 N	31.04 W	0.36
10100.00	9 49	S 56 43 E	100.00	10083.50	7.76 S	16.72 W	0.20
10200.00	9 17	S 58 2 E	100.00	10182.11	16.70 S	2.75 W	0.57
10300.00	8 37	S 56 59 E	100.00	10280.89	25.06 S	10.39 E	0.68
10400.00	7 51	S 56 18 E	100.00	10379.86	32.94 S	22.35 E	0.78
10500.00	7 39	S 56 18 E	100.00	10478.94	40.44 S	33.57 E	0.20
10600.00	7 40	S 56 10 E	100.00	10578.05	47.85 S	44.65 E	0.03
10700.00	7 30	S 53 56 E	100.00	10677.18	55.41 S	55.47 E	0.34
10800.00	7 19	S 50 23 E	100.00	10776.34	63.32 S	65.66 E	0.49
10900.00	6 26	S 46 53 E	100.00	10875.62	71.24 S	74.65 E	0.[illegible]
11000.00	6 7	S 45 37 E	100.00	10975.02	78.80 S	82.54 E	0.[illegible]
11100.00	5 28	S 46 39 E	100.00	11074.51	85.79 S	89.82 E	0.66
11200.00	4 29	S 45 29 E	100.00	11174.13	91.80 S	96.06 E	0.99
11300.00	3 53	S 43 11 E	100.00	11273.86	97.02 S	101.16 E	0.62
11400.00	4 1	S 38 5 E	100.00	11373.63	102.25 S	105.64 E	0.37
11500.00	4 36	S 37 2 E	100.00	11473.34	108.20 S	110.22 E	0.60
11600.00	4 52	S 34 4 E	100.00	11573.00	114.91 S	115.02 E	0.36
11700.00	5 19	S 31 56 E	100.00	11672.61	122.35 S	119.85 E	0.49
11800.00	5 43	S 28 25 E	100.00	11772.14	130.67 S	124.68 E	0.53
11900.00	5 33	S 22 26 E	100.00	11871.66	139.53 S	128.89 E	0.61
12000.00	5 13	S 14 8 E	100.00	11971.22	148.44 S	131.84 E	0.85

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AMOCO PRODUCTION COMPANY
ANSCHUTZ RANCH EAST FLD
UINTA COUNTY, WYOMING

SLOT : 17
WELL : ARE W30-13
DECLINATION : 15.00

DATE PRINTED : 11-FEB-87
OUR REF. NO. : S02800.8AM
JOB NUMBER :

MEASURED DEPTH	DRIFT ANGLE D M	DRIFT DIRECTION D M	COURSE LENGTH	TRUE VERTICAL DEPTH	RECTANGULAR COORDINATES		DOGLEG SEVERITY
12100.00	5 22	S 7 58 E	100.00	12070.79	157.49 S	133.61 E	0.59
12200.00	6 0	S 4 9 E	100.00	12170.30	167.34 S	134.65 E	0.74
12300.00	6 20	S 10 59 E	100.00	12269.72	177.99 S	136.06 E	0.80
12400.00	7 36	S 33 33 E	100.00	12368.98	189.15 S	140.63 E	2.99
12500.00	8 56	S 42 31 E	100.00	12467.94	200.47 S	149.48 E	1.85
12600.00	10 23	S 46 30 E	100.00	12566.51	212.43 S	161.25 E	1.[illegible]
12700.00	12 30	S 50 57 E	100.00	12664.52	225.52 S	176.16 E	2.29
12800.00	14 41	S 52 10 E	100.00	12761.71	240.13 S	194.56 E	2.20
12900.00	16 55	S 51 53 E	100.00	12857.93	256.88 S	216.02 E	2.24
13000.00	19 12	S 52 49 E	100.00	12953.00	275.81 S	240.55 E	2.30
13100.00	21 1	S 52 58 E	100.00	13046.90	296.55 S	267.96 E	1.83
13200.00	23 14	S 52 13 E	100.00	13139.53	319.42 S	297.88 E	2.23
13300.00	25 10	S 53 4 E	100.00	13230.74	344.29 S	330.46 E	1.96
13400.00	26 4	S 52 36 E	100.00	13320.91	370.41 S	364.91 E	0.94
13500.00	26 21	S 52 11 E	100.00	13410.63	397.36 S	399.90 E	0.32
13600.00	27 23	S 51 45 E	100.00	13499.84	425.20 S	435.50 E	1.07
13700.00	29 3	S 51 20 E	100.00	13587.95	454.61 S	472.52 E	1.67
13800.00	30 35	S 50 48 E	100.00	13674.71	485.85 S	511.20 E	1.56
13900.00	31 9	S 50 45 E	100.00	13760.54	518.29 S	550.95 E	0.[illegible]
14000.00	31 33	S 50 33 E	100.00	13845.95	551.28 S	591.18 E	0.[illegible]
14100.00	31 37	S 51 38 E	100.00	13931.13	584.17 S	631.93 E	0.56
14200.00	32 53	S 51 43 E	100.00	14015.70	617.26 S	673.79 E	1.27
14300.00	32 30	S 51 36 E	100.00	14099.86	650.77 S	716.14 E	0.39
14400.00	30 56	S 50 20 E	100.00	14184.93	683.87 S	756.98 E	1.69
14500.00	30 36	S 51 12 E	100.00	14270.85	716.22 S	796.61 E	0.55

CLOSURE - DISTANCE : 1071.24
DIRECTION : S 48 2 E

REPORT UNITS : Feet
SURVEY CALCULATION METHOD : Radius of curvature

SURVEY RUN INFORMATION

SEEKER 0-5500 / 20-OCT-86 / 410-0346 / ROBERT BROZE
SEEKER 5500-14500 / 09-FEB-87 / 410-0762 / DENNY COY

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OIL, GAS & MINING

43-043-30279

AMOCO PRODUCTION COMPANY
ANSCHULTZ RANCH EAST W30-13
ANSCHUTZ RANCH
SUMMIT CO., UTAH
" MAIN "

STATISTICAL SUMMARY OF DIP LOG CALCULATIONS
8.0 CORRELATION INTERVAL 2.0 STEP 80.0 MAXIMUM DIP ANGLE

DEPTH INTERVAL	AVERAGE DIP ANGLE	FRACTIONAL STANDARD DEVIATION	MEAN DIP AZIMUTH	VECTOR STRENGTH	NUMBER OF SAMPLES
300 - 350	38.3 DEG.	.27	98 (S 82 E)	.88	20
350 - 400	35.7 DEG.	.28	103 (S 77 E)	.98	25
400 - 450	35.8 DEG.	.28	113 (S 67 E)	.87	25
450 - 500	40.8 DEG.	.26	97 (S 83 E)	.90	25
500 - 550	42.2 DEG.	.23	103 (S 77 E)	.72	25
550 - 600	39.3 DEG.	.42	125 (S 55 E)	.56	25
600 - 650	52.5 DEG.	.22	117 (S 63 E)	.33	25
650 - 700	40.4 DEG.	.18	86 (N 86 E)	.89	25
700 - 750	40.7 DEG.	.10	91 (S 89 E)	.92	25
750 - 800	40.5 DEG.	.23	91 (S 89 E)	.99	25
800 - 850	45.2 DEG.	.19	94 (S 86 E)	.89	25
850 - 900	45.1 DEG.	.13	94 (S 86 E)	.99	25
900 - 950	42.3 DEG.	.18	90 (S 90 E)	.91	25
950 - 1000	42.9 DEG.	.12	99 (S 81 E)	1.00	25
1000 - 1050	47.5 DEG.	.17	110 (S 70 E)	.98	25
1050 - 1100	49.6 DEG.	.15	96 (S 84 E)	.98	25
1100 - 1150	51.9 DEG.	.19	119 (S 61 E)	.45	25
1150 - 1200	49.8 DEG.	.31	68 (N 68 E)	.49	25
1200 - 1250	44.5 DEG.	.38	156 (S 24 E)	.15	24
1250 - 1300	47.4 DEG.	.28	311 (N 49 W)	.31	25
1300 - 1350	46.8 DEG.	.26	246 (S 66 W)	.41	24
1350 - 1400	41.3 DEG.	.35	206 (S 26 W)	.30	19
1400 - 1450	52.2 DEG.	.13	108 (S 72 E)	.96	25
1450 - 1500	60.8 DEG.	.10	104 (S 76 E)	.91	23
1500 - 1550	54.6 DEG.	.21	80 (N 80 E)	.76	25
1550 - 1600	38.2 DEG.	.36	109 (S 71 E)	.59	16
1600 - 1650	56.2 DEG.	.19	207 (S 27 W)	.11	14
1650 - 1700	47.7 DEG.	.32	166 (S 14 E)	.27	24
1700 - 1750	54.4 DEG.	.21	152 (S 28 E)	.33	15
1750 - 1800	33.1 DEG.	.36	148 (S 32 E)	.53	25
1800 - 1850	40.4 DEG.	.30	208 (S 28 W)	.91	25
1850 - 1900	39.3 DEG.	.26	194 (S 14 W)	.67	25
1900 - 1950	38.3 DEG.	.27	209 (S 29 W)	.88	25
1950 - 2000	33.2 DEG.	.53	204 (S 24 W)	.34	25
2000 - 2050	32.5 DEG.	.49	208 (S 28 W)	.30	20
2050 - 2100	53.6 DEG.	.20	276 (N 84 W)	.39	19
2100 - 2150	52.7 DEG.	.25	335 (N 25 W)	.10	25
2150 - 2200	53.3 DEG.	.27	302 (N 58 W)	.34	23
2200 - 2250	45.9 DEG.	.32	323 (N 37 W)	.27	23
2250 - 2300	44.2 DEG.	.29	269 (S 89 W)	.57	25
2300 - 2350	43.5 DEG.	.19	286 (N 74 W)	.73	25
2350 - 2400	45.6 DEG.	.30	275 (N 85 W)	.56	25
2400 - 2450	50.1 DEG.	.25	278 (N 82 W)	.69	24
2450 - 2500	41.5 DEG.	.24	286 (N 74 W)	.72	25

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STATISTICAL SUMMARY OF DIP LOG CALCULATIONS
8.0 CORRELATION INTERVAL 2.0 STEP 80.0 MAXIMUM DIP ANGLE

DEPTH INTERVAL	AVERAGE DIP ANGLE	FRACTIONAL STANDARD DEVIATION	MEAN DIP AZIMUTH	VECTOR STRENGTH	NUMBER OF SAMPLES
2500 - 2550	36.6 DEG.	.30	292 (N 68 W)	.57	25
2550 - 2600	43.2 DEG.	.26	288 (N 72 W)	.91	25
2600 - 2650	44.3 DEG.	.23	297 (N 63 W)	.30	23
2650 - 2700	36.2 DEG.	.32	262 (S 82 W)	.42	25
2700 - 2750	42.7 DEG.	.29	270 (N 90 W)	.74	25
2750 - 2800	43.4 DEG.	.32	270 (N 90 W)	.79	25
2800 - 2850	43.3 DEG.	.30	282 (N 78 W)	.86	20
2850 - 2900	40.7 DEG.	.20	283 (N 77 W)	.64	25
2900 - 2950	47.8 DEG.	.27	316 (N 44 W)	.70	23
2950 - 3000	51.1 DEG.	.25	317 (N 43 W)	.59	23
3000 - 3050	38.8 DEG.	.42	277 (N 83 W)	.36	23
3050 - 3100	51.9 DEG.	.20	292 (N 68 W)	.89	23
3100 - 3150	49.9 DEG.	.29	260 (S 80 W)	.58	24
3150 - 3200	49.3 DEG.	.27	294 (N 66 W)	.88	25
3200 - 3250	52.4 DEG.	.27	272 (N 88 W)	.58	23
3250 - 3300	51.0 DEG.	.25	312 (N 48 W)	.52	22
3300 - 3350	51.3 DEG.	.23	21 (N 21 E)	.67	15
3350 - 3400	61.3 DEG.	.17	278 (N 82 W)	.67	9
3400 - 3450	39.0 DEG.	.40	345 (N 15 W)	.08	22
3450 - 3500	43.0 DEG.	.33	319 (N 41 W)	.23	24
3500 - 3550	39.9 DEG.	.46	283 (N 77 W)	.11	20
3550 - 3600	51.2 DEG.	.25	289 (N 71 W)	.25	25
3600 - 3650	48.7 DEG.	.18	302 (N 58 W)	.38	16
3650 - 3700	43.6 DEG.	.43	250 (S 70 W)	.38	22
3700 - 3750	43.7 DEG.	.35	209 (S 29 W)	.49	16
3750 - 3800	41.5 DEG.	.47	284 (N 76 W)	.36	17
3800 - 3850	38.1 DEG.	.46	42 (N 42 E)	.19	20
3850 - 3900	48.3 DEG.	.25	292 (N 68 W)	.27	23
3900 - 3950	47.9 DEG.	.20	242 (S 62 W)	.29	22
3950 - 4000	32.8 DEG.	.50	303 (N 57 W)	.13	23
4000 - 4050	45.3 DEG.	.41	115 (S 65 E)	.12	13
4050 - 4100	54.9 DEG.	.23	129 (S 51 E)	.66	16
4100 - 4150	40.5 DEG.	.39	113 (S 67 E)	.10	21
4150 - 4200	46.7 DEG.	.33	304 (N 56 W)	.30	20
4200 - 4250	36.8 DEG.	.45	332 (N 28 W)	.45	14
4250 - 4300	47.5 DEG.	.37	340 (N 20 W)	.32	13
4300 - 4350	51.6 DEG.	.26	268 (S 88 W)	.50	24
4350 - 4400	39.6 DEG.	.49	117 (S 63 E)	.24	18
4400 - 4450	49.1 DEG.	.24	59 (N 59 E)	.29	21
4450 - 4500	44.8 DEG.	.26	91 (S 89 E)	.30	18
4500 - 4550	50.6 DEG.	.28	106 (S 74 E)	.15	18
4550 - 4600	41.2 DEG.	.41	92 (S 88 E)	.17	22
4600 - 4650	39.8 DEG.	.39	265 (S 85 W)	.43	13
4650 - 4700	41.9 DEG.	.39	230 (S 50 W)	.15	20
4700 - 4750	52.3 DEG.	.16	330 (N 30 W)	.61	16
4750 - 4800	35.3 DEG.	.42	356 (N 4 W)	.43	20
4800 - 4850	42.6 DEG.	.52	286 (N 74 W)	.20	18
4850 - 4900	53.3 DEG.	.15	52 (N 52 E)	.08	22
4900 - 4950	55.3 DEG.	.28	138 (S 42 E)	.10	17

Welex does not guarantee the accuracy of any interpretation of data, conversion of log data to physical rock parameters or recommendations which may be given by Welex personnel which may appear on the log or in any other form. Any use of Welex data, interpretations, conversions or recommendations agrees that Welex is not responsible except in the case of gross negligence or wilful misconduct, and that loss, damages, or expenses resulting from the use thereof

STATISTICAL SUMMARY OF DIP LOG CALCULATIONS
8.0 CORRELATION INTERVAL 2.0 STEP 80.0 MAXIMUM DIP ANGLE

DEPTH INTERVAL	AVERAGE DIP ANGLE	FRACTIONAL STANDARD DEVIATION	MEAN DIP AZIMUTH	VECTOR STRENGTH	NUMBER OF SAMPLES
4950 - 5000	39.5 DEG.	.31	15 (N 15 E)	.05	23
5000 - 5050	51.1 DEG.	.19	166 (S 14 E)	.13	22
5050 - 5100	43.0 DEG.	.32	331 (N 29 W)	.32	25
5100 - 5150	46.5 DEG.	.33	341 (N 19 W)	.33	22
5150 - 5200	43.7 DEG.	.33	338 (N 22 W)	.31	18
5200 - 5250	61.0 DEG.	.14	237 (S 57 W)	.22	8
5250 - 5300	54.0 DEG.	.22	319 (N 41 W)	.35	21
5300 - 5350	56.2 DEG.	.12	158 (S 22 E)	.51	13
5350 - 5400	43.1 DEG.	.43	288 (N 72 W)	.65	19
5400 - 5450	51.7 DEG.	.11	271 (N 89 W)	.85	3

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" REPEAT "

STATISTICAL SUMMARY OF DIP LOG CALCULATIONS
8.0 CORRELATION INTERVAL 2.0 STEP 80.0 MAXIMUM DIP ANGLE

DEPTH INTERVAL	AVERAGE DIP ANGLE	FRACTIONAL STANDARD DEVIATION	MEAN DIP AZIMUTH	VECTOR STRENGTH	NUMBER OF SAMPLES
5200 - 5250	52.0 DEG.	.34	346 (N 14 W)	.38	19
5250 - 5300	42.4 DEG.	.34	334 (N 26 W)	.24	16
5300 - 5350	53.5 DEG.	.42	292 (N 68 W)	.67	15
5350 - 5400	47.2 DEG.	.38	221 (S 41 W)	.56	20
5400 - 5450	23.0 DEG.	.00	228 (S 48 W)	1.00	1

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

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CORRELATION INTERVAL	CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
306.0	314.0 B	43.3	79	1.0	226	348	18.4	18.0	-7.4	-16.5	-.3		2	0
308.0	316.0 C	32.9	65	1.0	225	347	18.4	18.0	-6.6			-4.4	2	4
310.0	318.0 C	33.6	83	.9	235	358	18.4	17.8	-6.2	-11.4			2	1
312.0	320.0 C	31.5	87	.9	238	4	18.3	17.7	-5.8	-10.4			2	1
314.0	322.0 C	52.9	73	1.0	249	14	18.2	17.8	3.8	-11.9			1	4
316.0	324.0 C	44.2	88	1.0	259	24	18.1	17.9	3.9			-11.2	1	3
318.0	326.0 B	33.4	101	1.2	258	21	18.0	18.1		-1.9		-6.6	1	2
320.0	328.0 C	33.4	102	1.3	261	23	18.1	18.1		-1.9		-6.6	1	2
322.0	330.0 B	33.6	106	1.4	263	26	18.1	18.0		-1.9		-6.6	1	2
324.0	332.0 B	20.4	165	1.4	264	29	18.1	17.8	.5	-4.2			2	1
326.0	334.0 B	42.4	98	1.5	265	32	18.1	17.6	-10.1			-3.9	2	4
328.0	336.0 B	49.1	97	1.6	267	35	18.0	17.7	-13.1			-3.9	2	4
330.0	338.0 C	57.0	95	1.7	269	37	18.0	17.9	-17.9			-4.0	2	4
332.0	340.0 C	37.0	116	1.7	268	37	18.1	18.1	-6.8	-12.7	2.2		2	0
338.0	346.0 D	58.1	35	1.8	263	38	18.4	18.1		1.9		15.0	2	3
340.0	348.0 C	21.7	169	1.8	262	39	18.6	18.2	5.2			.0	1	3
342.0	350.0 A	30.4	117	1.8	260	41	18.8	18.4	-5.9	-10.0	2.1		2	0
344.0	352.0 A	33.3	110	1.8	259	43	19.0	18.8	-6.6	-10.8	4.2		2	0
346.0	354.0 B	37.9	103	1.8	258	45	18.9	18.9	-9.5	-11.9	7.2		2	0
348.0	356.0 C	40.0	96	1.7	257	47	18.8	19.0	-10.5			-.8	2	4
350.0	358.0 B	54.1	98	1.6	256	49	18.7	18.8	-17.3			-1.3	2	4
352.0	360.0 C	37.7	102	1.5	256	51	18.5	18.7	-9.6			-1.3	2	4
354.0	362.0 C	55.2	101	1.4	256	52	18.6	18.8	-18.1			-1.3	2	4
356.0	364.0 A	37.2	104	1.4	257	53	18.6	18.9	-9.3	-10.8	8.4		2	0
358.0	366.0 B	40.5	98	1.3	259	53	18.6	19.0	.2			-10.9	1	3
360.0	368.0 C	34.2	111	1.2	260	53	18.6	19.0	-8.4			-2.3	2	4
362.0	370.0 B	33.5	111	1.2	261	52	18.6	19.1	2.4			-8.2	1	3
364.0	372.0 C	43.4	105	1.2	259	50	18.6	19.3	2.4	-9.7			1	4
366.0	374.0 C	43.5	108	1.2	259	51	18.6	19.2	2.5	-9.6			1	4
368.0	376.0 B	22.0	125	1.2	261	52	18.6	19.2	-4.5			-2.7	2	4
370.0	378.0 B	28.8	69	1.2	263	55	18.6	19.1	-3.5	-9.4			1	4
372.0	380.0 B	36.7	94	1.2	268	58	18.6	18.9	-9.2	-8.0	10.6		2	0
374.0	382.0 A	36.1	95	1.2	271	62	18.7	19.1	-1.1	-10.9	-7.3		1	0
376.0	384.0 A	36.5	101	1.2	275	67	19.0	19.6	-.9	-11.1	-7.9		1	0
378.0	386.0 A	37.2	107	1.2	280	73	19.0	19.6	-.7	-11.4	-8.1		1	0
380.0	388.0 B	41.8	114	1.2	283	78	19.1	19.6	-11.6			1.6	2	4
382.0	390.0 B	10.0	120	1.1	286	83	19.1	19.4	-.2			-2.1	1	3
384.0	392.0 B	22.4	99	1.1	287	86	18.8	18.8		-1.6		2.8	2	3
386.0	394.0 B	16.8	92	1.2	287	88	18.6	18.7	-2.5			-2.7	1	3
388.0	396.0 A	38.7	101	1.2	288	90	18.4	18.6	-8.1	-2.7	13.8		2	0
390.0	398.0 A	38.3	100	1.3	289	92	18.4	18.6	-7.8	-1.8	13.7		2	0
392.0	400.0 A	38.1	102	1.3	290	95	18.4	18.7	-5.6	-13.7	-1.8		1	0
394.0	402.0 B	38.4	106	1.3	293	98	18.4	18.7	-5.6	-13.8	-1.8		1	0
396.0	404.0 B	35.4	110	1.2	295	102	18.4	18.6	-5.4	-12.4	-1.6		1	0
398.0	406.0 B	36.8	114	1.2	298	105	18.3	18.4	-5.3			-7.6	1	3
400.0	408.0 B	38.4	120	1.2	302	106	18.2	18.3	-5.1			-8.4	1	3
402.0	410.0 A	30.3	110	1.2	304	106	18.2	18.2	-5.4	-10.2	-.6		1	0
404.0	412.0 A	34.8	109	1.2	305	106	18.3	18.3	-6.6	-12.2	-.4		1	0
406.0	414.0 A	35.4	108	1.2	305	106	18.3	18.4	-6.7	-12.4	-.4		1	0
408.0	416.0 B	35.7	108	1.2	302	106	18.4	18.5	-6.7	-12.7	-.5		1	0
410.0	418.0 C	36.5	105	1.2	299	105	18.5	18.5	-6.9	-13.1	.2		1	0
412.0	420.0 B	41.3	102	1.2	296	104	18.5	18.5	-6.7	.7	15.6		2	0
414.0	422.0 C	41.9	96	1.2	296	104	18.6	18.5	-6.8			9.0	2	4
416.0	424.0 B	30.6	103	1.2	295	104	18.6	18.5	-5.2	.2			2	1
418.0	426.0 B	30.4	104	1.2	298	104	18.7	18.7	-5.2	.1			2	1

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL	CORR. GRADE		DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
420.0	428.0	B	30.3	105	1.2	298	105	18.8	18.8	-5.2	.1			2	1
422.0	430.0	C	49.3	106	1.2	298	106	19.0	18.9	-10.6			-10.5	1	3
424.0	432.0	C	39.7	106	1.2	297	105	19.2	19.1	-7.7	-.1			2	1
426.0	434.0	B	43.3	98	1.2	295	104	19.3	19.0	-9.6			-7.8	1	3
428.0	436.0	C	44.5	93	1.2	295	103	19.6	19.0	-10.8			-7.4	1	3
430.0	438.0	C	44.8	215	1.2	294	102	19.7	19.1	12.7			-4.7	1	3
432.0	440.0	B	22.8	103	1.2	294	102	19.7	19.0	-3.8			-3.9	1	3
434.0	442.0	B	33.8	105	1.3	295	102	19.4	18.9	-6.5	-.7			2	1
436.0	444.0	A	11.1	115	1.3	295	101	19.2	18.8	-1.8	-.7	3.2		2	0
438.0	446.0	B	45.1	139	1.3	295	101	18.9	18.6	-1.4			-12.7	1	3
440.0	448.0	C	28.6	95	1.3	293	99	18.7	18.6	-5.3			-4.4	1	3
442.0	450.0	D	42.7	211	1.3	293	98	18.6	18.5	-4.3			-11.4	2	4
444.0	452.0	C	25.3	90	1.3	292	98	18.4	18.5	-3.5	1.2			2	1
446.0	454.0	C	20.4	170	1.2	293	98	18.3	18.4	-4.0	-6.4			2	1
448.0	456.0	C	56.9	94	1.2	295	98	18.1	18.2	-12.3			14.3	2	4
450.0	458.0	D	57.4	115	1.2	294	98	18.1	18.1	-16.8			9.0	2	4
452.0	460.0	B	28.2	107	1.3	292	97	18.1	18.1		-1.7		3.7	2	3
454.0	462.0	B	28.6	105	1.3	291	95	18.3	18.4	-3.9			-5.4	1	3
456.0	464.0	B	30.8	105	1.4	291	95	18.6	18.9	-4.2			-6.1	1	3
458.0	466.0	B	34.7	109	1.4	292	94	18.7	19.1	-4.4			-7.5	1	3
460.0	468.0	B	41.5	95	1.4	294	96	18.8	19.3	-8.1			-7.8	1	3
462.0	470.0	C	38.1	23	1.4	293	97	18.8	19.2		14.6		9.1	2	3
464.0	472.0	C	44.0	60	1.4	292	97	18.8	19.1	-1.3	11.2	13.8		2	0
466.0	474.0	B	43.5	64	1.4	292	97	18.8	19.2	-2.1	9.9	14.3		2	0
468.0	476.0	C	56.5	99	1.4	291	96	18.8	19.3	-14.2	-1.6			2	1
470.0	478.0	B	50.8	103	1.4	291	94	18.8	19.7	-12.5	-3.2			2	1
472.0	480.0	C	49.2	103	1.4	291	93	18.7	19.7	-12.0	-3.7			2	1
474.0	482.0	D	49.5	102	1.3	291	93	18.6	19.5	-12.0	-3.4			2	1
476.0	484.0	B	42.2	103	1.3	292	93	18.4	19.1		-2.7		6.5	2	3
478.0	486.0	B	25.6	111	1.4	293	93	18.2	18.5	-2.7			-5.1	1	3
480.0	488.0	B	53.9	109	1.4	294	93	17.9	18.2	-8.1			-14.4	1	3
482.0	490.0	C	61.3	101	1.4	294	93	17.9	18.1		-4.1		13.3	2	3
484.0	492.0	C	53.6	119	1.4	294	93	17.9	18.1	-5.1			-15.5	1	3
486.0	494.0	C	34.8	104	1.4	293	93	17.9	18.2		-2.3		4.7	2	3
488.0	496.0	C	36.1	102	1.4	294	93	17.9	18.2	-7.1	-1.9			2	1
490.0	498.0	C	26.5	105	1.5	295	93	17.9	18.2	-2.6	-8.2	-1.7		1	0
492.0	500.0	C	32.5	104	1.5	295	93	17.9	18.1	-6.3	-2.0			2	1
494.0	502.0	D	37.0	116	1.5	295	93	17.9	18.0	-8.4			3.3	2	4
496.0	504.0	D	28.0	5	1.5	294	93	17.9	17.9	-4.9			4.9	1	3
498.0	506.0	C	36.3	97	1.5	293	92	17.9	18.0		-1.0		5.7	2	3
500.0	508.0	A	34.2	112	1.5	293	92	18.0	18.2	-3.9	-10.9	-3.9		1	0
502.0	510.0	A	34.0	111	1.5	293	91	18.1	18.4	-6.8	-3.9	10.9		2	0
504.0	512.0	A	33.3	107	1.5	292	91	18.2	18.6	-6.9	-3.1	10.8		2	0
506.0	514.0	B	34.7	104	1.6	291	90	18.4	18.8	-4.6	-11.7	-3.0		1	0
508.0	516.0	A	39.2	97	1.6	291	89	18.5	19.0	-6.1	-14.2	-1.8		1	0
510.0	518.0	C	39.8	84	1.6	290	88	18.6	19.2		-14.7		-6.7	1	2
512.0	520.0	D	21.6	110	1.6	291	88	18.6	19.4	-4.5	-2.7			2	1
514.0	522.0	C	49.5	106	1.6	291	88	18.6	19.6	-13.1	-6.5			2	1
516.0	524.0	C	53.5	102	1.6	289	88	18.5	19.7	-14.4	-6.0			2	1
518.0	526.0	C	46.5	104	1.6	288	88	18.4	19.5	-11.6	-5.6			2	1
520.0	528.0	C	49.1	109	1.5	287	87	18.3	19.0	-5.5	-18.6			1	4
522.0	530.0	B	49.5	115	1.6	287	87	18.1	18.4	-4.0	-17.7			1	4
524.0	532.0	B	41.2	101	1.6	288	87	17.9	17.8		-3.5		5.4	2	3
526.0	534.0	B	38.7	101	1.6	290	87	17.7	17.5	-5.0			-8.0	1	3
528.0	536.0	B	39.7	124	1.7	292	87	17.6	17.3	-.8	11.0	-8.1		1	0

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
530.0	538.0	C	41.7	127	1.6	291	87	17.7	17.3	-10.4			.8	2	4
532.0	540.0	C	33.2	52	1.6	293	87	17.8	17.3	-7.8			-1.2	1	3
534.0	542.0	C	39.4	105	1.6	292	88	17.8	17.4	-4.7			-8.5	1	3
536.0	544.0	D	57.6	111	1.6	294	91	17.9	17.4	-7.9			-16.9	1	3
538.0	546.0	D	66.9	191	1.6	297	94	17.8	17.4		5.4		-17.2	1	2
540.0	548.0	D	44.9	303	1.6	298	98	17.7	17.6	12.3			-4.6	2	4
542.0	550.0	D	49.7	310	1.6	300	100	17.6	17.8	15.0			-4.0	2	4
544.0	552.0	C	50.0	333	1.5	300	101	17.5	17.9	14.5	17.5	-13.5		2	0
546.0	554.0	D	35.8	95	1.6	299	101	17.5	17.9	-5.2	1.5			2	1
548.0	556.0	D	30.4	110	1.6	299	102	17.5	17.8	-5.4			4.1	2	4
550.0	558.0	D	55.3	151	1.6	299	103	17.5	17.7	1.3	-15.8			1	4
552.0	560.0	C	24.5	62	1.6	299	104	17.5	17.7	-5.4			.0	1	3
554.0	562.0	C	26.0	79	1.6	299	106	17.6	17.7	-5.5			-1.6	1	3
556.0	564.0	C	30.7	96	1.7	299	108	17.8	17.8	-6.0			-3.7	1	3
558.0	566.0	C	31.3	101	1.6	299	111	17.9	17.8	-6.0			-4.1	1	3
560.0	568.0	C	46.5	97	1.7	300	113	17.8	17.7	-11.0			-6.0	1	3
562.0	570.0	C	49.7	131	1.7	301	115	17.7	17.6		-5.7		6.5	2	3
564.0	572.0	D	48.7	160	1.7	302	116	17.5	17.5	-12.8	-13.6	13.3		2	0
566.0	574.0	C	61.0	104	1.7	302	117	17.5	17.5	-11.1	6.6			2	1
568.0	576.0	D	54.2	100	1.7	303	118	17.5	17.5		7.1		14.4	2	3
570.0	578.0	D	37.0	113	1.7	304	118	17.5	17.5	-4.6	1.3	12.4		2	0
572.0	580.0	C	60.1	108	1.7	303	119	17.5	17.5	-11.0	5.8			2	1
574.0	582.0	C	54.4	90	1.7	304	120	17.5	17.6	-4.0	11.9			2	1
576.0	584.0	D	47.9	211	1.7	304	121	17.5	17.7	-9.3			-10.2	2	4
578.0	586.0	D	33.2	287	1.7	303	121	17.5	17.8	7.4			4.5	1	3
580.0	588.0	D	33.3	280	1.7	303	123	17.6	17.9	7.1	11.4	-4.5		1	0
582.0	590.0	C	5.8	118	1.7	303	124	17.6	17.9		-.6		-.3	1	2
584.0	592.0	C	6.2	187	1.7	304	127	17.6	17.9		-.7		-1.5	1	2
586.0	594.0	C	23.2	158	1.6	306	130	17.5	17.9	-2.9			-3.9	1	3
588.0	596.0	D	8.5	154	1.6	307	134	17.5	17.9		-2.0		-1.5	1	2
590.0	598.0	D	53.3	268	1.6	307	138	17.5	17.9		15.9		-1.6	1	2
592.0	600.0	C	51.9	273	1.6	308	141	17.5	18.0		15.9		-1.0	1	2
594.0	602.0	B	38.4	118	1.7	309	142	17.6	17.9	-3.3	5.6	11.9		2	0
596.0	604.0	B	49.3	114	1.7	311	143	17.6	17.8	-13.2			-3.7	1	3
598.0	606.0	A	52.9	104	1.6	312	144	17.6	17.6	-2.0	14.4	16.7		2	0
600.0	608.0	B	56.9	109	1.6	309	145	17.6	17.6	-2.8	15.0			2	1
602.0	610.0	B	43.2	98	1.6	309	146	17.5	17.6	-11.1			.7	1	3
604.0	612.0	C	53.1	100	1.6	309	147	17.5	17.5		-15.0		.7	1	2
606.0	614.0	D	47.0	175	1.6	310	147	17.5	17.5	-13.2	-8.8	15.8		2	0
608.0	616.0	D	62.1	306	1.6	309	148	17.4	17.4	9.6	-13.4			2	1
610.0	618.0	D	58.3	296	1.6	308	148	17.4	17.5	4.8	-15.9			2	1
612.0	620.0	C	54.3	191	1.6	307	148	17.4	17.4		-16.8		-16.7	1	2
614.0	622.0	D	52.9	190	1.6	306	147	17.4	17.5		-16.1		-15.9	1	2
616.0	624.0	D	71.0	134	1.7	307	147	17.4	17.6	-17.3	10.3			2	1
618.0	626.0	D	70.5	135	1.6	306	147	17.4	17.8	-17.1	9.8			2	1
620.0	628.0	D	71.1	135	1.6	306	148	17.4	17.9	-17.4	10.5			2	1
622.0	630.0	D	40.2	143	1.6	305	148	17.4	17.9		-13.9		-6.5	1	2
624.0	632.0	D	57.6	326	1.5	306	147	17.4	17.8	14.2	-.8			2	1
626.0	634.0	D	48.9	16	1.6	306	146	17.4	17.7	14.5	15.4			2	1
628.0	636.0	D	36.0	247	1.6	308	145	17.3	17.5	7.9			-4.8	1	3
630.0	638.0	D	46.7	302	1.6	308	144	17.2	17.4	12.6			5.1	1	3
632.0	640.0	D	64.6	166	1.6	308	143	17.0	17.4		-13.7		8.7	2	3
634.0	642.0	C	46.7	333	1.7	307	143	16.9	17.3	11.0	3.3			2	1
636.0	644.0	C	19.9	1	1.7	307	142	16.8	17.3	4.3	3.8	-5.3		2	0
638.0	646.0	C	50.2	104	1.7	306	142	16.9	17.3	-1.3			13.6	2	4

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL	CORR. GRADE		DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	DIA NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
640.0	648.0	A	45.9	92	1.7	306	142	17.1	17.4	1.8	13.4	10.6		2	0
642.0	650.0	B	54.4	101	1.8	306	142	17.6	17.7	-16.4			-1.1	1	3
644.0	652.0	B	53.7	102	1.8	305	142	18.0	18.1	-16.3			-1.2	1	3
646.0	654.0	B	53.1	102	1.8	304	142	18.3	18.5	-16.3			-1.2	1	3
648.0	656.0	C	53.4	102	1.8	303	142	18.2	18.7	-16.5			-1.3	1	3
650.0	658.0	C	27.9	354	1.7	302	140	18.0	18.8	7.0	5.5			2	1
652.0	660.0	C	38.4	79	1.7	302	139	17.8	18.8		-6.4		3.0	1	2
654.0	662.0	D	43.9	72	1.7	299	136	17.6	18.8	4.6			11.3	2	4
656.0	664.0	B	48.8	74	1.8	299	133	17.6	18.9	4.5	17.9	9.5		2	0
658.0	666.0	C	21.2	354	1.8	299	130	17.8	18.9	5.3	5.0			2	1
660.0	668.0	C	45.1	71	1.9	302	129	18.1	18.8		-8.9		3.3	1	2
662.0	670.0	C	49.1	93	1.9	302	128	18.1	18.6	-1.9			14.0	2	4
664.0	672.0	B	48.2	95	1.9	301	128	18.1	18.5	-2.4	11.0			2	1
666.0	674.0	B	34.9	83	1.8	300	128	17.9	18.6	-8.6			.4	1	3
668.0	676.0	B	46.8	81	1.7	298	129	17.9	18.8	-13.5	-12.1	14.2		1	0
670.0	678.0	B	42.1	87	1.7	299	130	18.1	18.9		-11.3		.0	1	2
672.0	680.0	B	32.6	88	1.8	301	131	18.3	19.0	-.8	8.0	7.9		2	0
674.0	682.0	A	32.2	87	1.8	300	131	18.5	19.1	-7.7	-7.7	8.0		1	0
676.0	684.0	B	35.0	90	1.7	300	130	18.6	19.1	-8.1	-9.3	8.4		1	0
678.0	686.0	B	36.4	83	1.7	299	128	18.7	19.4	-8.8	-9.0	9.9		1	0
680.0	688.0	B	45.1	91	1.7	299	126	18.7	19.5	-1.7	11.0			2	1
682.0	690.0	A	37.0	94	1.7	300	124	18.6	19.5	-1.3	7.0	11.5		2	0
684.0	692.0	B	39.8	98	1.8	300	122	18.6	19.6		-13.2		-3.4	1	2
686.0	694.0	B	39.3	89	1.7	300	120	18.6	19.5	-2.1			10.1	2	4
688.0	696.0	B	39.9	86	1.9	300	120	18.6	19.3	-1.5			10.4	2	4
690.0	698.0	B	34.0	102	1.9	300	121	18.7	19.1	-7.5			-3.5	1	3
692.0	700.0	B	47.5	108	1.9	300	122	18.5	18.8	-5.8	4.9	18.3		2	0
694.0	702.0	B	48.0	117	2.0	299	125	18.1	18.8	-8.2			10.8	2	4
696.0	704.0	A	46.7	116	2.0	297	126	17.7	18.6	-6.7	3.1	17.3		2	0
698.0	706.0	C	48.5	116	2.0	295	126	17.3	18.7	-10.8	-18.0			1	4
700.0	708.0	A	37.7	91	2.0	296	124	17.5	19.1	-1.6	7.7	10.5		2	0
702.0	710.0	A	36.9	89	1.9	296	120	18.1	19.6	-1.6	7.6	10.7		2	0
704.0	712.0	A	36.6	87	2.0	297	118	18.5	20.2	-1.6	7.6	10.9		2	0
706.0	714.0	B	36.1	86	1.9	299	117	18.9	20.3	-8.8	-11.0	7.5		1	0
708.0	716.0	C	38.3	120	2.0	300	117	19.0	20.2		-14.0		-7.3	1	2
710.0	718.0	B	32.1	92	2.0	301	117	19.0	20.1	-2.4	5.3			2	1
712.0	720.0	B	32.7	92	1.9	300	116	18.8	20.1	-2.5	5.2			2	1
714.0	722.0	A	44.4	88	2.0	301	116	18.6	20.0	-11.9	-14.9	9.2		1	0
716.0	724.0	B	45.1	88	1.9	300	116	18.5	19.9	-3.3	9.0			2	1
718.0	726.0	A	46.6	92	1.9	300	116	18.5	19.7	-3.4	8.2	16.8		2	0
720.0	728.0	A	44.4	92	2.0	299	116	18.7	19.7	-3.5	7.6	15.6		2	0
722.0	730.0	A	42.2	92	2.0	298	115	18.8	19.8	-3.9	7.0	14.5		2	0
724.0	732.0	A	42.5	91	2.0	299	115	18.8	19.8	-10.9	-14.6	7.4		1	0
726.0	734.0	A	42.8	91	2.0	301	115	18.8	19.8	-10.7	-14.8	7.5		1	0
728.0	736.0	B	44.1	91	2.0	301	115	18.8	19.9	-11.7			-3.9	1	3
730.0	738.0	B	40.0	90	2.0	302	115	18.9	20.2	-10.8	-13.5	6.9		1	0
732.0	740.0	B	40.2	90	2.0	302	113	19.0	20.6	-11.0	-13.8	6.7		1	0
734.0	742.0	C	44.3	91	2.0	301	111	19.2	20.8	-11.6			-4.7	1	3
736.0	744.0	C	43.1	86	2.0	302	110	19.2	20.9	-11.6			-3.7	1	3
738.0	746.0	C	39.9	89	1.9	300	110	19.3	20.8	-3.4	6.3	14.0		2	0
740.0	748.0	C	39.6	228	2.0	299	112	19.2	20.7	-3.9			-11.5	2	4
742.0	750.0	B	38.8	97	2.0	298	113	19.1	20.5	-4.1	4.4	13.8		2	0
744.0	752.0	B	46.1	85	2.1	296	113	19.0	20.2	-3.3			12.9	2	4
746.0	754.0	B	45.5	77	2.1	297	113	18.7	20.1	-1.2			13.1	2	4
748.0	756.0	B	38.0	68	2.0	297	113	18.5	20.2	.7			10.2	2	4

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL	CORR. GRADE		DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	DIA NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
750.0	758.0	B	40.9	67	1.9	299	111	18.3	20.2	-11.3	-10.5			1	4
752.0	760.0	B	40.5	95	1.9	298	111	18.3	20.3	-4.7			9.4	2	4
754.0	762.0	B	35.2	96	1.9	298	110	18.4	20.3	-4.1	3.5			2	1
756.0	764.0	A	41.5	100	2.0	298	110	18.6	20.3	-9.6	-15.1	3.2		1	0
758.0	766.0	A	41.9	99	2.1	299	110	18.5	20.3	-5.8	3.4	15.2		2	0
760.0	768.0	A	41.3	94	2.1	300	109	18.4	20.4	-4.6	4.7	14.6		2	0
762.0	770.0	A	42.2	92	2.1	300	108	18.4	20.5	-9.9	-15.0	5.1		1	0
764.0	772.0	B	56.3	93	2.1	300	107	18.2	20.7	-8.8	7.1			2	1
766.0	774.0	B	57.3	93	2.1	300	106	18.1	20.9	-16.3			-9.3	1	3
768.0	776.0	B	59.2	94	2.1	299	105	18.2	20.9	-17.2			-10.5	1	3
770.0	778.0	B	30.7	73	2.1	299	106	18.4	20.9	-.9	6.7			2	1
772.0	780.0	B	14.1	93	2.1	298	106	18.6	21.0	-1.3	1.4			2	1
774.0	782.0	B	38.4	99	2.1	297	107	18.8	21.0		2.4		8.0	2	3
776.0	784.0	B	27.4	86	2.1	297	107	18.9	20.9	-2.2	3.9			2	1
778.0	786.0	B	29.3	91	2.1	298	108	18.6	20.9	-2.8	3.5			2	1
780.0	788.0	B	36.2	93	2.0	298	108	18.3	20.8	-8.1			-3.9	1	3
782.0	790.0	B	42.5	94	2.0	297	109	18.0	20.8	-10.0	-15.0	4.7		1	0
784.0	792.0	A	44.9	91	2.0	297	108	17.7	20.9	-4.6	6.1	15.7		2	0
786.0	794.0	A	43.9	91	2.0	296	108	17.7	20.9	-5.0	5.7	15.2		2	0
788.0	796.0	A	44.7	90	2.0	297	108	17.8	21.0	-11.3	-15.7	6.1		1	0
790.0	798.0	A	46.2	91	2.0	300	107	18.0	20.9	-5.0	6.0	16.9		2	0
792.0	800.0	B	44.2	90	2.0	301	106	18.3	20.8	-11.4	-15.9	5.7		1	0
794.0	802.0	A	38.2	94	2.1	300	105	18.2	20.7	-4.4	3.1	13.1		2	0
796.0	804.0	A	37.8	92	2.0	299	104	18.0	20.6	-4.4	3.3	12.8		2	0
798.0	806.0	A	38.9	93	2.0	297	103	17.8	20.6	-7.6	-13.2	3.1		1	0
800.0	808.0	A	42.1	95	2.1	296	103	17.8	20.7	-8.3	-14.0	2.6		1	0
802.0	810.0	B	40.5	94	2.1	295	102	18.2	20.9	-8.3			-5.8	1	3
804.0	812.0	A	45.8	100	2.1	296	103	18.6	21.0	-8.3	1.3	17.8		2	0
806.0	814.0	A	41.4	100	2.1	296	104	18.9	21.2	-8.3			-7.1	1	3
808.0	816.0	A	39.0	84	2.1	298	104	18.9	21.2	-3.7	6.0	13.4		2	0
810.0	818.0	A	38.9	84	2.1	300	105	18.9	21.1	-3.7	6.0	13.3		2	0
812.0	820.0	A	37.7	84	2.1	300	104	18.7	21.2	-3.8	5.7	12.7		2	0
814.0	822.0	A	38.4	87	2.0	300	104	18.7	21.2	-8.7	-13.2	5.0		1	0
816.0	824.0	B	42.4	106	2.1	299	103	18.5	21.3	-8.2			7.6	2	4
818.0	826.0	B	40.4	101	2.1	299	103	18.4	21.4	-6.9			7.7	2	4
820.0	828.0	B	34.7	100	2.1	299	102	18.5	21.3	-5.6	.6			2	1
822.0	830.0	C	40.9	92	2.1	299	102	18.6	21.1		-14.8		-5.8	1	2
824.0	832.0	B	43.2	78	2.1	300	102	18.7	20.8	-12.0	-15.1	7.8		1	0
826.0	834.0	C	49.1	82	2.1	300	101	18.7	20.6	-13.4			-5.6	1	3
828.0	836.0	B	48.8	82	2.1	300	101	18.7	20.5	-13.2			-5.7	1	3
830.0	838.0	C	63.6	103	2.1	298	101	18.6	20.4	-16.6			-17.9	1	3
832.0	840.0	B	62.7	97	2.1	297	102	18.5	20.4	-14.9			18.1	2	4
834.0	842.0	C	42.6	114	2.1	295	103	18.4	20.4	-9.5			5.9	2	4
836.0	844.0	C	48.7	126	2.1	294	104	18.3	20.4	-4.9	-18.0			1	4
838.0	846.0	C	64.5	305	2.2	295	104	18.3	20.4		16.8		-11.4	2	3
840.0	848.0	C	30.9	35	2.1	295	104	18.4	20.6	4.2	11.6			2	1
842.0	850.0	B	42.2	106	2.1	295	104	18.6	20.9	-7.5			-8.1	1	3
844.0	852.0	B	53.1	114	2.1	295	103	18.8	21.2		-5.1		8.8	2	3
846.0	854.0	B	46.0	103	2.1	295	102	18.9	21.5	-9.0			-9.3	1	3
848.0	856.0	B	53.3	109	2.1	295	102	18.9	21.7	-13.3			10.1	2	4
850.0	858.0	A	47.2	93	2.1	295	102	18.9	21.7	-11.1	-18.8	3.6		1	0
852.0	860.0	A	41.5	92	2.1	295	101	18.9	21.6	-9.0	-15.3	3.3		1	0
854.0	862.0	A	41.5	92	2.1	295	101	18.9	21.5	-8.9	-15.4	3.2		1	0
856.0	864.0	B	41.2	92	2.1	295	101	18.9	21.5	-8.6	-15.2	3.1		1	0
858.0	866.0	B	43.1	94	2.1	295	101	18.9	21.4	-8.5	-16.4	2.5		1	0

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL	CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
860.0	868.0	B 44.5	89	2.0	295	101	18.9	21.3	-5.9	4.5	16.9		2	0
862.0	870.0	A 44.6	86	2.0	294	102	18.8	21.1	-12.1	-16.6	5.7		1	0
864.0	872.0	B 42.4	82	2.0	293	102	18.2	20.9	-3.9	6.7			2	1
866.0	874.0	B 47.3	94	2.0	293	103	17.5	20.7		-17.5		-7.1	1	2
868.0	876.0	B 56.0	92	2.1	292	103	17.2	20.5	-14.6			-8.6	1	3
870.0	878.0	B 57.6	91	2.1	293	104	17.1	20.4	-15.7			-8.5	1	3
872.0	880.0	A 43.6	93	2.1	292	104	17.6	20.5	-5.2	3.7	15.3		2	0
874.0	882.0	A 41.7	92	2.1	293	103	18.3	20.6	-8.9	-14.9	3.7		1	0
876.0	884.0	B 40.5	91	2.1	294	103	18.6	20.6	-8.8	-14.5	3.7		1	0
878.0	886.0	B 41.1	91	2.2	296	102	18.8	20.7	-5.4	3.5	15.0		2	0
880.0	888.0	B 43.0	95	2.2	296	101	18.9	20.5		-16.3		-7.1	1	2
882.0	890.0	C 36.5	121	2.2	297	101	18.8	20.3		-12.1		-8.4	1	2
884.0	892.0	B 40.3	95	2.2	296	101	18.8	20.3	-7.2	2.0	14.7		2	0
886.0	894.0	B 41.8	96	2.2	296	101	18.8	20.3	-6.2	1.6	15.5		2	0
888.0	896.0	A 41.5	98	2.2	296	101	18.4	20.3	-6.9	1.1	15.0		2	0
890.0	898.0	A 43.2	97	2.3	295	101	17.9	20.3	-7.8	-15.5	1.3		1	0
892.0	900.0	B 52.6	98	2.3	294	100	17.4	20.2	-9.8	1.3			2	1
894.0	902.0	B 60.7	97	2.3	293	100	17.2	20.2	-15.1			-12.8	1	3
896.0	904.0	B 48.6	94	2.3	292	101	17.2	20.3	-6.7	2.8	17.9		2	0
898.0	906.0	A 44.9	91	2.2	291	101	17.4	20.2	-6.5	3.3	15.8		2	0
900.0	908.0	B 37.1	88	2.2	291	101	17.6	20.1	-4.3	3.5			2	1
902.0	910.0	A 42.4	90	2.2	292	100	18.1	19.9	-9.6	-15.1	3.3		1	0
904.0	912.0	B 42.3	88	2.2	292	100	18.5	19.7	-9.4			-5.9	1	3
906.0	914.0	B 35.8	97	2.3	292	100	18.6	19.6		-12.3		-5.8	1	2
908.0	916.0	B 35.3	98	2.3	291	101	18.0	19.6		.8		6.3	2	3
910.0	918.0	A 41.1	99	2.3	290	101	17.5	19.8	-7.2	-13.9	.7		1	0
912.0	920.0	A 45.0	99	2.4	289	101	16.8	20.1	-7.3	-14.5	.7		1	0
914.0	922.0	A 37.7	95	2.4	288	100	17.0	20.3	-5.4	1.3			2	1
916.0	924.0	B 64.3	72	2.3	289	98	17.7	20.5	-6.1	17.9			2	1
918.0	926.0	B 62.0	71	2.3	289	98	18.3	20.6	-5.6	16.9			2	1
920.0	928.0	C 51.8	281	2.3	289	98	18.8	20.6		1.9		-12.0	2	3
922.0	930.0	B 32.4	91	2.3	289	98	18.9	20.4	-4.6	1.7			2	1
924.0	932.0	C 36.1	91	2.3	289	98	18.8	20.2	-5.3	1.9			2	1
926.0	934.0	B 40.1	86	2.3	288	99	18.7	20.0	-5.2	3.7	14.2		2	0
928.0	936.0	B 36.6	82	2.3	288	99	18.6	19.9	-4.8	4.4	12.1		2	0
930.0	938.0	A 37.2	91	2.3	287	99	18.4	19.9	-5.7	2.2	12.7		2	0
932.0	940.0	A 44.3	89	2.3	287	100	18.3	19.8	-6.1	3.4	16.3		2	0
934.0	942.0	A 44.5	92	2.2	288	100	18.1	19.7	-6.5	2.7	16.4		2	0
936.0	944.0	A 41.6	93	2.2	289	99	17.9	19.5	-5.5	1.9	14.6		2	0
938.0	946.0	A 40.7	92	2.3	289	98	17.9	19.5	-8.5	-14.1	1.9		1	0
940.0	948.0	A 38.5	92	2.3	289	97	18.0	19.6	-7.9	-13.1	1.6		1	0
942.0	950.0	A 38.2	90	2.3	287	96	18.3	19.6	-7.8	-13.1	1.6		1	0
944.0	952.0	A 39.0	94	2.4	286	95	18.5	19.6	-7.9	-13.8	.7		1	0
946.0	954.0	B 43.5	94	2.4	286	96	18.6	19.6	-7.1	.8	16.2		2	0
948.0	956.0	C 51.2	100	2.4	285	95	18.6	19.5	-9.6			-11.5	1	3
950.0	958.0	B 39.6	97	2.4	285	95	18.6	19.5	-7.3	-.6			2	1
952.0	960.0	B 42.2	97	2.4	284	94	18.6	19.5	-7.7	-.6	15.5		2	0
954.0	962.0	B 44.0	96	2.4	284	94	18.7	19.4	-7.9	-.7	16.5		2	0
956.0	964.0	A 43.2	96	2.4	284	94	18.6	19.2	-8.4	-.5	16.0		2	0
958.0	966.0	B 52.2	96	2.5	283	94	18.6	19.1		-.8		10.6	2	3
960.0	968.0	B 34.3	97	2.5	284	94	18.6	19.2	-6.0	-.4			2	1
962.0	970.0	B 42.6	104	2.4	282	94	18.5	19.4		-15.3		-9.2	1	2
964.0	972.0	B 44.5	94	2.4	283	93	18.7	19.6		-16.9		-8.4	1	2
966.0	974.0	B 45.4	90	2.4	283	94	18.6	19.5	-7.1	1.5	17.4		2	0
968.0	976.0	B 45.7	93	2.4	282	94	18.6	19.3	-8.1	.6	17.5		2	0

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
970.0	978.0	A	42.2	92	2.5	282	95	18.6	19.1	-7.4	1.1	15.5		2	0
972.0	980.0	A	41.7	97	2.5	280	95	18.4	19.2	-6.8	-15.0	-.6		1	0
974.0	982.0	B	29.3	104	2.5	280	93	18.4	19.4	-5.5	-1.8			2	1
976.0	984.0	B	30.2	108	2.5	278	92	18.5	19.4	-6.1	-3.0			2	1
978.0	986.0	B	47.3	103	2.6	278	91	18.6	19.4	-6.8			-11.1	1	3
980.0	988.0	B	40.6	100	2.6	278	90	18.7	19.3	-8.4	-2.5			2	1
982.0	990.0	C	45.6	105	2.6	279	91	18.6	19.1	-6.3	-16.9			1	4
984.0	992.0	C	46.6	94	2.6	280	92	18.5	19.1	-8.6	-17.9			1	4
986.0	994.0	B	45.3	104	2.6	280	91	18.5	19.1	-10.3	-3.8			2	1
988.0	996.0	B	47.9	96	2.6	280	91	18.4	19.1	-8.6	-18.5			1	4
990.0	998.0	B	47.4	102	2.7	280	91	18.5	19.0		-3.7		7.1	2	3
992.0	1000.0	B	38.7	100	2.7	282	89	18.4	19.0	-5.2			-7.9	1	3
994.0	1002.0	B	45.0	99	2.7	281	88	18.4	19.0		-3.3		6.5	2	3
996.0	1004.0	B	44.3	99	2.9	278	88	18.3	18.9		-3.3		6.3	2	3
998.0	1006.0	B	47.0	100	2.9	279	88	18.2	18.8		-4.1		6.6	2	3
1000.0	1008.0	B	43.8	99	2.9	278	88	18.2	18.8	-6.1	-15.5			1	4
1002.0	1010.0	B	29.5	92	2.9	277	86	18.3	18.8		-.8		4.2	2	3
1004.0	1012.0	B	40.0	105	2.8	280	85	18.5	18.8	-9.1			4.1	2	4
1006.0	1014.0	B	40.1	104	2.8	281	84	18.5	18.8	-9.2			4.0	2	4
1008.0	1016.0	B	40.6	108	2.8	280	84	18.5	18.8	-9.5			3.6	2	4
1010.0	1018.0	B	27.7	103	2.8	281	85	18.2	19.0	-5.4	-2.6			2	1
1012.0	1020.0	B	56.9	120	2.7	280	86	18.0	19.2	-17.9			2.7	2	4
1014.0	1022.0	B	57.5	120	2.7	280	87	17.8	19.4	-18.2			2.8	2	4
1016.0	1024.0	B	57.5	119	2.7	281	87	17.7	19.5	-18.1			3.1	2	4
1018.0	1026.0	B	47.6	114	2.8	282	86	17.7	19.5		-9.4		3.0	2	3
1020.0	1028.0	B	44.4	101	2.8	281	85	17.9	19.6		-4.8		5.2	2	3
1022.0	1030.0	C	58.2	108	2.8	281	84	18.0	19.7	-5.7			-16.5	1	3
1024.0	1032.0	A	46.2	116	2.8	280	82	18.2	19.8	-12.4			1.7	2	4
1026.0	1034.0	B	46.9	129	2.8	280	80	18.4	19.8	-13.3			-1.7	2	4
1028.0	1036.0	B	44.7	129	2.8	280	79	18.6	19.7	-12.2			-1.8	2	4
1030.0	1038.0	A	50.3	127	2.8	279	76	18.8	19.6	1.7	-12.9	-17.0		1	0
1032.0	1040.0	A	53.3	118	2.7	278	75	18.9	19.6	.6	-16.8	-16.4		1	0
1034.0	1042.0	A	52.4	116	2.7	279	74	18.8	19.8	-.2	-16.4	-16.0		1	0
1036.0	1044.0	C	55.0	114	2.7	278	73	18.9	20.4	-.6			-18.0	1	3
1038.0	1046.0	C	54.4	109	2.7	280	74	18.9	20.9	-2.1			-17.4	1	3
1040.0	1048.0	C	54.1	110	2.8	280	75	18.9	21.0	-2.0			-17.3	1	3
1042.0	1050.0	C	53.0	101	2.8	279	75	19.0	21.1		-11.2		4.7	2	3
1044.0	1052.0	B	39.9	98	2.8	279	76	19.0	21.0	-3.7			-9.6	1	3
1046.0	1054.0	C	46.0	98	2.7	278	75	19.0	21.0	-4.4			-12.1	1	3
1048.0	1056.0	C	50.0	87	2.7	278	76	19.0	21.1	-12.3	-4.4			2	1
1050.0	1058.0	C	48.6	98	2.7	279	76	19.1	21.2	-13.1	-8.0			2	1
1052.0	1060.0	C	50.1	92	2.7	280	77	19.1	21.3	-13.1			7.0	2	4
1054.0	1062.0	A	48.8	88	2.7	281	77	19.1	21.3	-11.0	-3.9	19.5		2	0
1056.0	1064.0	B	50.4	98	2.7	283	76	19.1	21.5	-5.5	-19.5			1	4
1058.0	1066.0	B	48.3	96	2.7	282	75	19.2	21.7	-13.0			5.2	2	4
1060.0	1068.0	B	48.3	94	2.8	282	74	19.2	21.8	-13.0			5.5	2	4
1062.0	1070.0	A	30.6	122	2.8	281	72	19.3	22.0	-7.7	-9.2	6.3		2	0
1064.0	1072.0	A	54.9	109	2.8	281	71	19.3	22.2	-18.6	-17.6	19.4		2	0
1066.0	1074.0	A	54.5	109	2.8	282	71	19.3	22.4	-18.5	-17.7	19.0		2	0
1068.0	1076.0	B	56.3	113	2.8	282	70	19.3	22.6	.9	-19.0			1	4
1070.0	1078.0	A	54.3	107	2.8	282	69	19.3	22.7	-.6	-19.2	-17.4		1	0
1072.0	1080.0	C	56.2	107	2.8	281	69	19.4	22.5	-.8			-19.6	1	3
1074.0	1082.0	C	56.8	105	2.8	281	68	19.3	22.4	-1.4			-19.9	1	3
1076.0	1084.0	D	36.5	99	2.8	281	68	19.3	22.3	-1.6			-9.4	1	3
1078.0	1086.0	C	34.7	98	2.8	281	68	19.2	22.3	-1.7			-8.6	1	3

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
1080.0	1088.0	C	61.1	82	2.8	282	69	19.3	22.3		-8.0		11.3	2	3
1082.0	1090.0	C	53.1	69	2.8	283	69	19.3	22.3	-12.3			-11.3	1	3
1084.0	1092.0	B	56.1	94	2.9	283	70	19.4	22.3	-17.9	-12.2			2	1
1086.0	1094.0	C	55.5	93	2.9	284	69	19.5	22.5		-11.8		5.8	2	3
1088.0	1096.0	C	50.9	74	2.9	284	68	19.5	22.9	-10.1			-11.9	1	3
1090.0	1098.0	C	46.6	93	2.9	284	68	19.5	23.1		-9.4		3.7	2	3
1092.0	1100.0	B	48.7	90	2.9	285	68	19.4	23.3	-4.2	-18.6	-9.1		1	0
1094.0	1102.0	B	46.9	92	2.9	285	67	19.4	23.2		-9.0		4.2	2	3
1096.0	1104.0	B	46.8	92	2.9	284	67	19.4	23.0		-9.3		3.8	2	3
1098.0	1106.0	A	44.3	94	2.8	283	66	19.4	23.1	-3.7	-15.2	-9.4		1	0
1100.0	1108.0	C	49.9	96	2.8	280	65	19.4	23.2		-17.9		-15.3	1	2
1102.0	1110.0	C	50.6	98	2.8	281	65	19.3	23.2		-17.9		-15.9	1	2
1104.0	1112.0	D	50.7	101	2.8	282	65	19.3	23.2	-16.1			1.1	2	4
1106.0	1114.0	D	53.8	106	2.8	281	67	19.3	22.9	-18.2			.1	2	4
1108.0	1116.0	B	56.1	107	2.8	282	69	19.3	22.9		-20.3		-19.7	1	2
1110.0	1118.0	B	55.9	116	2.8	283	72	19.5	22.8	1.5			-19.9	1	3
1112.0	1120.0	B	55.8	120	2.8	284	77	19.5	22.8	1.1			-19.9	1	3
1114.0	1122.0	D	38.6	303	2.8	287	82	19.5	22.9		12.8		-.2	2	3
1116.0	1124.0	C	32.5	158	2.8	290	87	19.5	23.0	4.9			-8.1	1	3
1118.0	1126.0	D	51.1	227	2.9	292	92	19.5	23.0		18.5		-.8	1	2
1120.0	1128.0	D	60.0	87	2.9	291	93	19.5	23.0	-12.9			17.4	2	4
1122.0	1130.0	C	46.0	249	2.8	290	93	19.5	23.5		20.3		5.3	1	2
1124.0	1132.0	D	60.8	86	2.9	289	91	19.5	23.9	-13.7			17.5	2	4
1126.0	1134.0	C	48.5	23	2.9	287	88	19.4	24.3	-16.7			8.4	1	3
1128.0	1136.0	D	72.2	72	2.8	289	85	19.3	24.5	-18.2	15.0			2	1
1130.0	1138.0	C	52.7	128	2.9	290	84	19.2	24.4	-18.3			-1.9	2	4
1132.0	1140.0	C	71.1	155	2.9	291	85	19.2	24.2		21.2	-16.8		1	4
1134.0	1142.0	D	60.0	179	2.9	291	86	19.2	24.1	-16.8			-21.1	2	4
1136.0	1144.0	D	54.5	207	2.9	289	87	19.3	24.0	-7.2			-21.6	2	4
1138.0	1146.0	D	44.0	106	2.9	288	86	19.4	22.5	-11.3			4.7	2	4
1140.0	1148.0	D	34.9	205	2.8	286	85	19.5	21.5	-2.5			-10.2	2	4
1142.0	1150.0	D	39.2	202	2.8	286	84	19.5	20.2	-2.8			-11.3	2	4
1144.0	1152.0	C	56.6	49	2.8	286	84	19.5	19.2	-3.1	16.3			2	1
1146.0	1154.0	C	59.0	51	2.9	286	84	19.4	19.4	-3.8	17.4			2	1
1148.0	1156.0	C	43.6	328	3.0	287	86	19.4	19.8		17.8		4.0	2	3
1150.0	1158.0	D	47.1	33	3.0	287	88	19.4	20.1		17.7		14.4	2	3
1152.0	1160.0	D	71.4	21	3.0	288	90	19.4	20.5		-19.2		18.8	1	2
1154.0	1162.0	D	70.7	22	2.9	289	91	19.5	20.8		-19.2		18.0	1	2
1156.0	1164.0	C	69.8	158	2.8	292	92	19.6	21.1	14.5	-18.8			1	4
1158.0	1166.0	D	60.1	278	2.7	291	93	19.6	21.2		3.9		-17.0	2	3
1160.0	1168.0	D	58.8	181	2.8	292	92	19.6	21.2	-16.7			-17.1	2	4
1162.0	1170.0	D	53.5	160	2.8	292	92	19.5	21.5	-17.0			-8.6	2	4
1164.0	1172.0	C	55.9	120	2.8	289	90	19.2	21.9	-18.4	-14.6			2	1
1166.0	1174.0	C	55.8	117	2.8	288	88	19.2	22.1	-18.3	-14.5			2	1
1168.0	1176.0	D	58.7	105	2.8	286	87	19.3	22.2	-18.7			8.2	2	4
1170.0	1178.0	D	58.7	104	2.8	285	86	19.4	22.2	-18.7			8.5	2	4
1172.0	1180.0	C	51.1	57	2.8	286	86	19.4	21.8	-16.2			-3.2	1	3
1174.0	1182.0	D	56.3	59	2.9	287	86	19.1	21.7	-19.0			-4.5	1	3
1176.0	1184.0	D	52.4	123	2.9	287	85	19.0	21.8	-.5			-16.8	1	3
1178.0	1186.0	D	30.3	60	2.9	286	84	18.8	21.7	-1.8	5.4			2	1
1180.0	1188.0	D	46.9	131	2.9	286	84	18.8	21.7	-14.0			-1.8	2	4
1182.0	1190.0	D	53.8	98	2.9	284	83	19.0	21.6	-14.7			8.0	2	4
1184.0	1192.0	D	22.1	41	2.9	284	82	19.2	21.5		6.1		5.5	2	3
1186.0	1194.0	D	38.0	349	3.0	285	81	19.1	21.5	-8.0			9.5	1	3
1188.0	1196.0	C	40.2	351	3.0	284	81	19.0	21.4	-8.9			10.0	1	3

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
1190.0	1198.0	D	17.6	67	3.0	284	83	18.7	21.4	-3.5	-4.7			1	4
1192.0	1200.0	D	19.1	84	2.9	285	83	18.4	21.4	-2.9	-5.4			1	4
1194.0	1202.0	D	41.8	322	2.9	283	83	18.3	21.3	13.4			4.0	2	4
1196.0	1204.0	D	67.6	12	2.9	284	81	18.4	21.2		-15.0		16.8	1	2
1198.0	1206.0	D	46.5	348	2.9	285	79	18.6	21.1	12.2			11.1	2	4
1200.0	1208.0	C	67.3	10	2.9	285	79	18.8	21.0		-15.5		16.2	1	2
1202.0	1210.0	C	70.4	190	2.9	286	79	18.9	21.1		19.5		-17.3	1	2
1204.0	1212.0	C	48.6	296	2.9	284	80	19.2	21.1		19.5		17.5	1	2
1206.0	1214.0	D	44.7	282	2.9	282	80	19.3	21.2	5.4	19.6			1	4
1208.0	1216.0	D	43.8	278	2.8	281	79	19.4	21.2	6.1	19.4			1	4
1210.0	1218.0	C	51.2	140	2.8	281	78	19.5	21.2	5.9			-16.0	1	3
1212.0	1220.0	C	50.6	158	2.9	282	77	19.5	21.2		-2.8		-13.5	1	2
1214.0	1222.0	C	49.7	155	3.0	284	77	19.4	21.1		-3.5		-13.3	1	2
1216.0	1224.0	C	13.8	66	3.0	285	76	19.3	21.1		-3.7		-1.1	1	2
1218.0	1226.0	C	16.3	16	3.1	282	76	19.2	21.1	2.0			3.9	2	4
1220.0	1228.0	C	36.1	25	3.1	282	75	19.2	21.1	2.1	12.2			2	1
1222.0	1230.0	B	27.2	288	3.1	280	76	19.3	21.1	8.6	6.4	-9.7		2	0
1224.0	1232.0	C	20.9	90	3.0	279	76	19.3	21.1	-3.8			2.2	2	4
1226.0	1234.0	C	36.9	176	3.0	279	76	19.0	21.0	-5.9			-9.2	2	4
1228.0	1236.0	D	53.4	19	3.1	278	77	18.7	21.1	-18.3	-12.5			1	4
1230.0	1238.0	D	57.0	171	3.0	278	78	18.4	21.0	16.8			-14.5	1	3
1232.0	1240.0	D	61.2	265	3.0	278	80	18.4	21.0		4.2		-16.8	2	3
1234.0	1242.0	D	60.2	172	3.1	279	83	18.9	20.9	17.9			-17.4	1	3
1236.0	1244.0	C	60.2	173	3.0	277	84	19.5	20.5	17.6			-17.1	1	3
1238.0	1246.0	D	34.7	142	3.0	279	85	20.0	20.2	-8.8	-11.2	6.4		2	0
1240.0	1248.0	D	65.7	184	3.1	279	86	20.2	19.7		8.6		-18.0	1	2
1244.0	1252.0	C	52.8	274	3.0	285	93	20.0	18.8	15.0	8.8			2	1
1246.0	1254.0	C	21.4	63	3.0	285	97	19.9	18.4	-6.6	8.1			2	1
1248.0	1256.0	C	24.1	64	2.9	286	100	19.8	18.1	-6.6	4.9			2	1
1250.0	1258.0	C	48.8	295	2.9	287	102	19.8	17.9	14.6	4.6			2	1
1252.0	1260.0	D	54.2	201	3.0	286	104	19.8	17.8	14.7	4.6			1	4
1254.0	1262.0	C	52.9	203	3.1	285	105	19.7	17.9	14.1	4.6			1	4
1256.0	1264.0	C	58.9	300	3.0	283	106	19.7	18.0		8.0		-13.9	2	3
1258.0	1266.0	C	58.3	303	2.9	280	108	19.6	18.0		8.2		-13.0	2	3
1260.0	1268.0	D	48.9	202	2.7	279	111	19.5	18.0	11.2			-9.9	1	3
1262.0	1270.0	D	49.7	204	2.5	279	113	19.5	18.0	11.5			-10.1	1	3
1264.0	1272.0	D	39.5	266	2.7	281	115	19.5	18.0	3.9			-11.6	2	4
1266.0	1274.0	D	17.9	319	2.6	281	116	19.8	18.0	4.4	2.1			2	1
1268.0	1276.0	D	18.4	315	2.6	282	117	19.9	18.0	4.5	1.7			2	1
1270.0	1278.0	C	18.8	316	2.6	282	117	19.9	18.1	4.6			-2.8	2	4
1272.0	1280.0	D	56.5	332	2.6	281	116	19.8	18.2		16.9		-4.6	2	3
1274.0	1282.0	D	25.6	306	2.6	280	115	19.5	18.4		1.5		-4.4	2	3
1276.0	1284.0	C	49.7	112	2.6	278	114	19.2	18.3	-10.2			10.6	2	4
1278.0	1286.0	C	43.2	178	2.5	279	115	18.9	17.8	4.0	-7.1			1	4
1280.0	1288.0	C	46.9	157	2.6	280	116	18.9	17.6	-13.1	-12.1			2	1
1282.0	1290.0	D	48.2	341	2.6	281	118	18.9	17.6		16.6		15.2	1	2
1284.0	1292.0	D	50.1	352	2.7	282	120	18.9	17.7		14.9		15.9	1	2
1286.0	1294.0	C	62.9	7	2.7	283	121	18.9	17.8	-7.7	16.4			1	4
1288.0	1296.0	C	59.9	21	2.6	283	122	19.2	17.7	-11.2	7.0			1	4
1290.0	1298.0	B	52.0	32	2.5	284	122	19.3	17.7	11.3			10.8	2	4
1292.0	1300.0	C	51.7	31	2.4	283	121	19.4	18.1	11.5			10.7	2	4
1294.0	1302.0	C	59.1	22	2.4	281	120	19.5	18.4	-12.1	5.6			1	4
1296.0	1304.0	D	54.4	286	2.4	280	120	19.2	18.8	10.6	-7.1			2	1
1298.0	1306.0	C	58.0	128	2.4	278	120	19.2	19.1	-16.1	-4.3			2	1
1300.0	1308.0	C	33.7	223	2.4	276	121	19.1	19.2	9.1	3.5	-13.1		1	0

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	DIA NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
1302.0	1310.0	B	37.5	214	2.5	274	121	19.0	19.3	8.2	1.4	-15.4		1	0
1304.0	1312.0	C	37.0	213	2.6	274	122	19.0	19.2	-7.0	-15.1			2	1
1306.0	1314.0	C	50.1	260	2.6	274	122	18.9	19.2	17.6	18.5			1	4
1308.0	1316.0	C	51.6	262	2.5	276	122	18.7	19.2	1.5			-18.4	2	4
1310.0	1318.0	D	37.3	93	2.4	276	126	18.8	19.1	-1.9	7.3			2	1
1312.0	1320.0	D	46.1	94	2.3	276	132	18.7	19.0		-14.1		-1.5	1	2
1314.0	1322.0	C	7.9	284	2.2	277	140	18.9	19.0		2.7		.3	1	2
1316.0	1324.0	C	62.0	239	2.1	277	147	18.7	18.8		1.8		-18.1	1	2
1318.0	1326.0	B	53.8	195	2.0	277	151	18.6	18.5	-17.3	-18.0	18.2		2	0
1322.0	1330.0	D	46.1	278	2.0	276	160	18.5	17.9	13.5	9.4			1	4
1324.0	1332.0	D	60.2	344	2.0	278	164	18.3	18.0	16.3			-16.7	2	4
1326.0	1334.0	C	47.5	13	2.0	279	166	18.2	18.6	13.2	8.5			2	1
1328.0	1336.0	C	49.2	159	2.0	279	166	18.3	18.9		1.7		11.1	2	3
1330.0	1338.0	C	52.6	205	2.0	279	165	18.7	19.2	-.7			-17.9	1	3
1332.0	1340.0	C	53.0	226	2.0	277	164	18.8	19.2		-11.8		-17.8	1	2
1334.0	1342.0	C	40.0	356	2.0	277	165	18.8	19.1	6.7			9.1	1	3
1336.0	1344.0	D	49.1	336	2.0	276	165	18.7	19.1	8.8			-13.2	2	4
1338.0	1346.0	C	48.7	283	1.9	274	166	18.6	19.1	-5.2			-15.5	2	4
1340.0	1348.0	D	63.5	104	1.8	275	166	18.6	19.1		-16.2		7.6	1	2
1342.0	1350.0	D	57.9	182	1.7	272	166	18.7	19.1	-16.6	-8.7			2	1
1344.0	1352.0	D	62.6	230	1.7	272	166	18.7	19.1	9.4	-16.3			1	4
1346.0	1354.0	D	39.8	266	1.8	270	167	18.7	19.0	-7.0			-9.7	2	4
1348.0	1356.0	D	36.5	286	1.9	271	168	18.6	18.9	10.0	6.9			1	4
1350.0	1358.0	C	40.1	316	1.8	270	167	18.6	18.8	11.4	13.7			1	4
1352.0	1360.0	C	50.8	292	1.7	271	167	18.6	18.8	-3.5			-16.9	2	4
1354.0	1362.0	C	3.8	12	1.7	272	168	18.5	18.8	-.6			-.6	2	4
1356.0	1364.0	C	41.9	259	1.6	271	168	18.6	18.8	9.2			-8.7	1	3
1358.0	1366.0	C	46.5	222	1.7	272	168	18.6	18.9	2.8	-11.6	-17.0		1	0
1360.0	1368.0	C	48.6	221	1.7	275	168	18.6	18.9	2.9	-11.8	-17.0		1	0
1362.0	1370.0	C	49.3	223	1.7	274	168	18.6	18.9	3.2			-15.7	1	3
1364.0	1372.0	C	47.4	213	1.6	273	167	18.6	18.8	.2	-14.2	-15.4		1	0
1366.0	1374.0	D	46.6	106	1.5	273	167	18.6	18.7	3.6	16.3			2	1
1368.0	1376.0	C	64.2	245	1.6	274	167	18.5	18.7	15.9	-8.4			1	4
1370.0	1378.0	D	11.9	85	1.6	274	168	18.5	18.6		3.4		1.8	2	3
1372.0	1380.0	C	23.4	185	1.6	271	167	18.5	18.6		-7.5		-5.2	1	2
1374.0	1382.0	B	30.3	36	1.6	268	168	18.7	18.9	.2	7.4	7.6		1	0
1376.0	1384.0	C	48.4	215	1.4	263	171	18.9	19.4	.2	-15.6			1	4
1378.0	1386.0	C	44.5	219	1.4	261	177	19.0	19.8	-.2			-14.0	1	3
1380.0	1388.0	D	41.7	49	1.3	259	182	18.9	19.6	11.6			.5	2	4
1382.0	1390.0	C	49.4	112	1.3	260	185	18.5	19.1	7.1			13.4	2	4
1384.0	1392.0	D	46.9	151	1.3	259	185	18.2	18.7	-13.4	-16.3			1	4
1390.0	1398.0	D	50.3	184	1.3	260	185	18.0	18.3		-.1		10.9	2	3
1400.0	1408.0	C	55.8	61	1.3	255	180	18.3	18.0	-4.7			17.3	1	3
1402.0	1410.0	C	57.8	114	1.4	261	180	18.2	18.0	-18.1			6.9	1	3
1404.0	1412.0	C	50.7	137	1.4	262	178	18.1	18.1		13.7		15.1	2	3
1406.0	1414.0	C	52.8	133	1.3	259	175	18.2	17.8	-16.3			-1.5	1	3
1408.0	1416.0	C	44.1	86	1.4	259	173	18.2	17.3	7.5	16.0			2	1
1410.0	1418.0	C	43.0	87	1.4	261	174	18.0	17.0	7.1			8.0	2	4
1412.0	1420.0	D	40.7	84	1.5	273	176	17.8	17.2	7.3			6.7	2	4
1414.0	1422.0	C	59.0	126	1.5	275	178	17.4	17.3		-17.3		1.9	1	2
1416.0	1424.0	C	29.8	111	1.5	272	180	17.3	17.4		-3.6		2.6	1	2
1418.0	1426.0	B	54.7	103	1.6	268	182	17.5	17.7	9.3			13.8	2	4
1420.0	1428.0	B	52.9	105	1.6	268	183	18.0	18.3	8.9			13.6	2	4
1422.0	1430.0	B	52.5	104	1.6	270	183	18.5	18.8	9.3			13.6	2	4
1424.0	1432.0	B	53.8	109	1.6	273	184	18.7	19.1	-15.0	6.3			1	4

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	DIA NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
1426.0	1434.0	B	56.1	115	1.6	274	184	18.9	19.3		-9.9		7.7	1	2
1428.0	1436.0	B	58.1	115	1.7	274	184	18.9	19.5	8.3			19.0	2	4
1430.0	1438.0	C	57.8	114	1.7	271	183	19.1	19.5	8.2			18.9	2	4
1432.0	1440.0	B	50.9	112	1.6	271	181	19.1	19.3	6.4			14.6	2	4
1434.0	1442.0	C	51.8	106	1.6	271	179	19.0	19.1		-6.9		7.5	1	2
1436.0	1444.0	C	55.9	109	1.6	273	178	19.0	18.9		-9.6		7.5	1	2
1438.0	1446.0	C	46.4	110	1.7	271	178	19.0	18.9	5.1			12.3	2	4
1440.0	1448.0	B	59.9	102	1.7	270	180	19.1	19.0		-6.8		11.6	1	2
1442.0	1450.0	C	56.1	117	1.6	270	181	19.2	19.1	6.2			18.1	2	4
1444.0	1452.0	C	55.4	118	1.5	269	183	19.2	19.1	6.2			17.7	2	4
1446.0	1454.0	B	51.0	113	1.5	272	183	18.9	18.9		-7.7		6.6	1	2
1448.0	1456.0	C	56.8	108	1.5	268	183	18.8	18.8		-7.4		9.4	1	2
1450.0	1458.0	B	60.1	104	1.4	269	182	18.7	18.8		-6.6		11.8	1	2
1452.0	1460.0	B	61.3	104	1.4	267	182	18.8	18.9		-6.8		12.6	1	2
1454.0	1462.0	B	61.9	104	1.4	266	182	18.9	19.1		-6.7		13.2	1	2
1456.0	1464.0	B	62.9	105	1.5	269	184	18.9	19.2		-6.6		14.0	1	2
1458.0	1466.0	B	59.6	110	1.5	266	186	18.9	19.4	11.3			18.9	2	4
1460.0	1468.0	B	59.2	114	1.5	269	188	18.8	19.5	-19.1	-8.4			1	4
1462.0	1470.0	B	55.9	114	1.5	268	189	18.8	19.6	9.8			16.8	2	4
1464.0	1472.0	B	61.7	116	1.6	272	191	18.8	19.6		-9.0		12.0	1	2
1466.0	1474.0	B	59.9	109	1.5	273	191	18.8	19.7		-4.3		13.7	1	2
1468.0	1476.0	B	55.4	109	1.6	271	191	18.8	19.8	11.6			15.3	2	4
1470.0	1478.0	B	57.0	108	1.5	269	190	19.0	19.9	-16.2	-3.6			1	4
1472.0	1480.0	B	57.5	106	1.5	267	190	19.0	19.7	12.8			16.3	2	4
1474.0	1482.0	B	60.5	105	1.4	264	189	19.0	19.5	-17.8	-3.1			1	4
1476.0	1484.0	C	67.7	108	1.4	263	190	18.7	18.9		-6.3		18.3	1	2
1478.0	1486.0	C	64.9	109	1.4	262	190	18.6	18.6		-6.0		15.5	1	2
1480.0	1488.0	C	71.5	351	1.4	262	190	18.4	18.4	17.1	-17.9			2	1
1484.0	1492.0	B	62.4	98	1.5	266	190	18.3	18.5	16.8			16.1	2	4
1486.0	1494.0	C	52.0	120	1.5	267	190	18.2	18.2	6.6			14.3	2	4
1488.0	1496.0	B	54.6	116	1.5	269	191	18.3	18.3	-15.0	-6.6			1	4
1490.0	1498.0	B	63.9	120	1.6	273	191	18.4	18.4		-11.9		10.7	1	2
1494.0	1502.0	B	70.4	109	1.5	274	187	18.8	18.8		-10.6		18.5	1	2
1496.0	1504.0	C	70.1	107	1.6	272	184	18.9	18.9		-10.5		18.3	1	2
1498.0	1506.0	C	47.1	39	1.6	272	183	18.8	18.8	13.6			-2.4	2	4
1500.0	1508.0	D	51.3	20	1.7	273	183	18.8	18.8	14.2	6.2			2	1
1502.0	1510.0	C	61.6	99	1.7	271	183	18.7	18.7	14.1			18.0	2	4
1504.0	1512.0	C	61.8	97	1.7	269	183	18.8	18.8	15.1			17.5	2	4
1506.0	1514.0	C	60.9	94	1.7	268	182	18.8	18.8	15.2			16.4	2	4
1508.0	1516.0	D	60.8	94	1.7	270	182	18.7	18.7	15.1			16.1	2	4
1510.0	1518.0	D	59.8	2	1.6	272	182	18.3	18.3	15.5			-15.9	2	4
1512.0	1520.0	C	63.5	94	1.7	269	183	17.7	17.7	16.3			16.7	2	4
1514.0	1522.0	B	64.0	96	1.6	263	184	17.3	17.3		-1.4		15.8	1	2
1516.0	1524.0	B	61.3	89	1.6	260	185	17.3	17.3		3.1		16.2	1	2
1518.0	1526.0	C	26.9	335	1.6	257	185	17.5	17.5		7.6		1.4	1	2
1520.0	1528.0	C	48.2	33	1.6	261	185	17.8	17.8	13.0			-4.2	2	4
1522.0	1530.0	C	46.2	42	1.6	264	185	18.1	18.1	12.6			-2.0	2	4
1524.0	1532.0	B	61.8	103	1.6	271	185	18.4	18.4	-18.1	-4.4			1	4
1526.0	1534.0	C	62.1	102	1.7	273	184	18.7	18.7	-18.6	-4.7			1	4
1528.0	1536.0	C	63.5	101	1.7	270	183	18.8	18.8		-5.1		14.8	1	2
1530.0	1538.0	C	65.4	101	1.7	267	183	18.9	18.9		-5.4		16.2	1	2
1532.0	1540.0	C	36.6	117	1.7	265	184	18.9	18.9	3.3			8.8	2	4
1534.0	1542.0	C	55.4	118	1.9	266	185	19.0	19.0	6.5			17.2	2	4
1536.0	1544.0	C	52.8	127	1.9	266	183	19.2	19.2	-16.7	-13.8			1	4
1538.0	1546.0	C	62.6	96	1.9	268	180	19.3	19.3	-18.8			15.4	1	3

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
1540.0	1548.0	C	69.3	104	1.8	269	178	19.3	19.3		-13.4		15.7	1	2
1542.0	1550.0	C	46.9	111	1.8	271	176	19.2	19.2	4.5			12.9	2	4
1544.0	1552.0	C	52.0	65	1.8	271	176	19.1	19.1	-6.5			15.0	1	3
1546.0	1554.0	C	34.5	16	1.8	271	176	19.1	19.1	8.1	3.8			2	1
1548.0	1556.0	C	35.2	9	1.9	270	176	19.0	19.0	7.8	2.5			2	1
1550.0	1558.0	C	32.8	13	1.9	271	175	19.0	19.0	7.4	3.1			2	1
1552.0	1560.0	C	42.5	118	2.0	272	175	18.9	18.9	-11.3			2.1	1	3
1556.0	1564.0	C	43.0	92	2.0	270	173	18.7	18.7	6.8	16.1			2	1
1558.0	1566.0	B	43.4	100	2.0	269	173	18.8	18.8	5.4	15.8			2	1
1560.0	1568.0	C	38.6	167	2.0	268	173	18.8	18.8		-14.8		-7.1	1	2
1562.0	1570.0	B	51.8	131	2.0	269	173	18.8	18.8		-17.3		-1.4	1	2
1564.0	1572.0	B	52.9	122	2.0	268	172	18.8	18.8	2.0	17.6	15.3		2	0
1566.0	1574.0	D	41.3	123	2.0	268	172	18.7	18.7	.6			11.0	2	4
1570.0	1578.0	D	34.1	157	1.9	268	173	18.4	18.4	-4.6			7.3	2	4
1572.0	1580.0	C	34.2	142	1.9	268	173	18.5	18.5	-2.4			8.2	2	4
1574.0	1582.0	D	18.8	167	1.9	269	171	18.7	18.7	-3.2	-.1			2	1
1584.0	1592.0	C	23.3	346	2.0	270	167	18.4	18.4		8.1		3.6	1	2
1586.0	1594.0	C	13.8	36	2.0	268	168	18.7	18.7		3.1		3.0	1	2
1588.0	1596.0	C	24.1	348	2.0	268	168	18.8	18.8		8.5		4.0	1	2
1590.0	1598.0	C	55.2	115	1.9	268	168	18.6	18.6		-15.4		2.3	1	2
1592.0	1600.0	C	61.7	112	1.9	270	168	18.4	18.4		-17.9		4.1	1	2
1610.0	1618.0	D	69.0	355	1.7	256	196	18.4	18.4	13.3	-17.3			2	1
1612.0	1620.0	D	58.4	115	1.7	255	199	18.4	18.4	12.6			15.7	2	4
1614.0	1622.0	C	54.4	119	1.8	251	203	18.6	18.6	11.0			13.8	2	4
1620.0	1628.0	D	32.0	110	1.6	235	211	19.6	19.6		1.8		6.7	1	2
1624.0	1632.0	D	50.7	236	1.4	230	206	19.6	19.6		-12.6		4.6	2	3
1626.0	1634.0	D	59.9	83	1.4	231	205	19.4	19.4	-5.3	16.7			1	4
1628.0	1636.0	D	55.3	305	1.3	233	204	19.4	19.4		4.6		-11.7	1	2
1630.0	1638.0	C	38.4	314	1.5	236	205	19.3	19.3		4.8		-5.2	1	2
1632.0	1640.0	C	62.2	314	1.5	239	207	19.4	19.4		10.7		-12.6	1	2
1634.0	1642.0	D	66.0	192	1.4	238	209	19.4	19.4	-15.6	12.8			2	1
1638.0	1646.0	D	65.6	194	1.4	236	212	19.4	19.4	-14.5	13.8			2	1
1642.0	1650.0	D	49.3	241	1.5	231	214	19.5	19.5	-16.1	-10.9			2	1
1646.0	1654.0	D	69.4	230	1.5	233	213	19.4	19.4		-16.4		18.8	2	3
1648.0	1656.0	D	55.1	62	1.6	235	213	19.4	19.4	17.8			-5.2	2	4
1650.0	1658.0	D	56.8	58	1.6	233	212	19.4	19.4	18.7			-6.5	2	4
1652.0	1660.0	C	65.4	202	1.5	230	212	19.2	19.2	-18.3	7.6			2	1
1654.0	1662.0	D	43.8	60	1.4	228	212	19.0	19.0		15.3		11.7	1	2
1656.0	1664.0	D	38.3	120	1.4	230	213	18.8	18.8		.3		7.5	1	2
1660.0	1668.0	D	42.3	106	1.4	234	213	18.9	18.9	10.3			5.8	2	4
1662.0	1670.0	C	6.0	251	1.4	233	211	19.2	19.2	-1.7			.2	2	4
1664.0	1672.0	D	53.4	118	1.3	232	210	19.4	19.4		.6		13.1	1	2
1666.0	1674.0	D	53.6	118	1.3	231	210	19.4	19.4		.3		13.1	1	2
1668.0	1676.0	D	52.9	118	1.3	230	209	19.5	19.5		.1		12.7	1	2
1670.0	1678.0	D	47.1	174	1.4	230	209	19.5	19.5	-3.0	12.0			2	1
1672.0	1680.0	C	68.3	191	1.4	229	207	19.6	19.6	-17.7	14.6			2	1
1674.0	1682.0	D	67.3	187	1.4	228	207	19.6	19.6	-15.1	16.4			2	1
1676.0	1684.0	D	64.1	305	1.5	225	206	19.6	19.6		5.4		-17.5	1	2
1678.0	1686.0	D	61.1	299	1.5	225	207	19.6	19.6		1.0		-17.6	1	2
1680.0	1688.0	D	57.1	48	1.6	223	206	19.6	19.6	18.5	10.4			2	1
1682.0	1690.0	D	39.8	61	1.5	222	206	19.6	19.6	10.8	9.0			2	1
1684.0	1692.0	D	67.0	277	1.5	224	205	19.5	19.5	15.0	-15.5			1	4
1686.0	1694.0	B	40.6	178	1.5	223	205	19.4	19.4	-4.7	7.6	15.5		2	0
1688.0	1696.0	C	37.6	193	1.5	222	209	19.4	19.4		-15.2		-5.6	1	2
1690.0	1698.0	C	37.4	205	1.5	217	213	19.5	19.5		-15.6		-6.7	1	2

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL	CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
1692.0	1700.0	D 26.4	225	1.5	215	218	19.7	19.6		-10.3		-5.8	1	2
1694.0	1702.0	C 25.3	233	1.5	214	221	19.7	19.7		-9.7		-5.8	1	2
1696.0	1704.0	D 55.7	72	1.5	214	223	19.5	19.4	5.2			18.6	1	3
1698.0	1706.0	D 38.1	301	1.5	214	225	19.3	19.3		-14.5		-5.1	2	3
1700.0	1708.0	D 64.0	288	1.5	214	224	19.0	19.0	8.8	-18.0			1	4
1702.0	1710.0	C 71.4	149	1.5	216	222	19.2	19.2		-17.9		19.1	1	2
1704.0	1712.0	D 58.9	202	1.5	217	222	19.4	19.4	-10.2	11.6			2	1
1712.0	1720.0	C 70.3	121	1.4	209	232	18.6	18.6	-15.6	17.8			1	4
1714.0	1722.0	D 46.3	33	1.5	209	231	19.0	19.0	11.9	17.9			1	4
1720.0	1728.0	D 48.1	248	1.4	208	222	18.6	18.6	-5.4			-14.3	1	3
1722.0	1730.0	D 48.1	245	1.4	208	220	18.6	18.6	-5.4			-14.3	1	3
1724.0	1732.0	D 56.0	44	1.4	207	218	18.7	18.7	14.6			-11.7	2	4
1726.0	1734.0	D 46.9	144	1.4	204	216	18.8	18.8	6.4			13.2	2	4
1728.0	1736.0	D 63.8	113	1.3	202	215	18.9	18.9	-15.1	7.6			1	4
1732.0	1740.0	D 47.5	151	1.4	202	214	18.9	18.9	4.4			14.4	2	4
1734.0	1742.0	D 54.6	189	1.4	203	213	18.9	18.9		11.2		18.4	2	3
1736.0	1744.0	C 58.0	200	1.3	204	212	19.0	19.0	-18.8			-12.5	1	3
1746.0	1754.0	D 25.9	25	1.1	206	203	19.3	19.3	4.4	8.9			1	4
1748.0	1756.0	D 56.7	91	1.2	212	203	19.3	19.3	18.6			8.2	2	4
1750.0	1758.0	B 40.9	98	1.2	216	202	19.3	19.3	-6.6	3.8	16.0		1	0
1752.0	1760.0	C 41.0	96	1.1	217	201	19.2	19.2	-6.0			9.9	1	3
1754.0	1762.0	C 40.7	99	1.1	219	200	19.0	19.0	-6.5			9.3	1	3
1756.0	1764.0	C 38.2	106	1.1	215	199	18.8	18.8	7.6	14.7			2	1
1758.0	1766.0	B 39.9	106	1.1	215	198	18.7	18.7	-8.2	.4	15.4		1	0
1760.0	1768.0	B 40.3	105	1.2	214	198	18.4	18.4	-8.2	.4	15.4		1	0
1762.0	1770.0	B 40.8	105	1.1	217	197	18.1	18.1	-8.2	.4	15.4		1	0
1764.0	1772.0	B 41.2	105	1.1	222	197	17.9	17.9	-8.2	.4	15.4		1	0
1766.0	1774.0	C 47.0	104	1.1	225	197	17.8	17.8		.6		9.6	1	2
1768.0	1776.0	B 43.6	100	1.1	226	196	17.8	17.8		1.4		9.0	1	2
1770.0	1778.0	B 9.3	136	1.2	227	196	17.7	17.7	-2.0			.3	1	3
1772.0	1780.0	C 12.8	85	1.3	229	195	17.7	17.7	2.3	3.5			2	1
1774.0	1782.0	C 22.9	207	1.3	230	195	17.9	17.9	-3.0			-4.8	1	3
1776.0	1784.0	B 22.7	207	1.3	231	195	18.3	18.3	-3.0			-4.9	1	3
1778.0	1786.0	C 20.8	209	1.3	229	194	18.8	18.8		-2.1		2.6	2	3
1780.0	1788.0	B 48.6	254	1.2	232	192	18.5	18.5	4.5	-10.3			1	4
1782.0	1790.0	B 44.1	250	1.1	234	189	17.9	17.9	3.4	-8.9			1	4
1784.0	1792.0	B 29.2	188	1.0	235	188	17.4	17.4	-4.9			-5.2	1	3
1786.0	1794.0	C 25.7	180	1.1	236	187	17.3	17.3	-4.6	-8.5			1	4
1788.0	1796.0	C 39.2	128	1.1	234	188	18.1	18.1		-7.5		2.5	1	2
1790.0	1798.0	C 10.2	101	1.1	233	188	18.9	18.9	-1.8			1.3	1	3
1792.0	1800.0	B 20.8	207	1.1	230	189	19.6	19.6	-2.2	-7.4	-2.6		1	0
1794.0	1802.0	C 44.8	209	1.1	229	189	20.0	20.0		-19.3		-13.2	1	2
1796.0	1804.0	C 31.2	251	1.1	230	189	20.0	20.0		-11.1		-2.6	2	3
1798.0	1806.0	B 31.9	249	1.1	230	188	19.9	19.9	-9.7	-11.2	6.4		2	0
1800.0	1808.0	B 19.6	220	1.2	235	187	19.7	19.7	-1.7	-6.2	-4.1		1	0
1802.0	1810.0	C 23.1	208	1.2	235	185	19.6	19.6	-2.3			-5.8	1	3
1804.0	1812.0	C 30.3	207	1.3	236	184	19.6	19.6	-8.0	-5.0			2	1
1806.0	1814.0	C 35.7	213	1.5	235	181	19.6	19.6	-10.3			2.2	2	4
1808.0	1816.0	C 37.0	210	1.6	233	179	19.7	19.7	-10.7			2.5	2	4
1810.0	1818.0	C 36.4	211	1.5	230	177	19.7	19.6	-10.6			2.0	2	4
1812.0	1820.0	C 41.0	206	1.4	229	175	19.7	19.7	-12.1	-9.3	15.4		2	0
1814.0	1822.0	C 40.5	218	1.3	232	174	19.9	19.9	-12.6			.1	2	4
1816.0	1824.0	B 44.1	220	1.3	240	174	20.0	20.0	-14.3			-.3	2	4
1818.0	1826.0	B 40.5	224	1.3	244	176	19.8	19.8	.7			-12.5	1	3
1820.0	1828.0	B 7.4	30	1.2	246	179	19.5	19.5	.6			1.5	1	3

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	DIA NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
1822.0	1830.0	B	33.6	206	1.2	246	181	19.2	19.2	-3.1			-8.8	1	3
1824.0	1832.0	B	21.0	191	1.3	239	181	19.0	19.0	-3.8	-7.5	-1.6		1	0
1826.0	1834.0	C	53.4	211	1.3	238	181	19.0	19.0	-4.5			-18.3	1	3
1828.0	1836.0	C	46.1	200	1.3	234	181	19.1	19.1	-13.2			6.1	2	4
1830.0	1838.0	C	55.0	207	1.2	237	181	19.1	19.1	-6.4			-19.0	1	3
1832.0	1840.0	C	47.9	199	1.2	238	180	19.1	19.1	-14.0			6.4	2	4
1834.0	1842.0	B	49.7	204	1.2	240	178	19.1	19.1	-15.5	-10.1			2	1
1836.0	1844.0	C	49.4	210	1.3	244	179	19.0	19.0	-3.7			-15.8	1	3
1838.0	1846.0	B	49.3	212	1.3	245	180	18.9	18.9	-3.6			-15.8	1	3
1840.0	1848.0	B	49.6	210	1.3	243	180	18.8	18.8	-15.7			4.0	2	4
1842.0	1850.0	B	55.5	201	1.3	240	179	18.8	18.8	-7.7			-18.5	1	3
1844.0	1852.0	B	48.0	202	1.2	242	178	18.9	18.9		-9.1		5.2	2	3
1846.0	1854.0	B	48.0	202	1.0	249	177	18.9	18.9		-9.2		5.0	2	3
1848.0	1856.0	C	48.9	202	1.0	251	177	18.8	18.8		-9.6		5.1	2	3
1850.0	1858.0	C	52.9	213	.9	249	178	18.7	18.7	-17.7			3.2	2	4
1852.0	1860.0	B	44.5	210	1.2	240	180	18.7	18.7	-3.3	-16.3	-9.8		1	0
1854.0	1862.0	C	41.8	198	1.2	237	180	18.7	18.7		-16.3		-11.0	1	2
1856.0	1864.0	B	39.1	210	1.1	241	180	18.7	18.7	-2.7			-10.8	1	3
1858.0	1866.0	C	53.0	204	1.2	247	179	18.7	18.7	-17.0			6.1	2	4
1860.0	1868.0	C	38.7	174	1.2	249	179	18.7	18.7	-8.1			-7.1	1	3
1862.0	1870.0	D	38.4	175	1.3	247	179	18.7	18.7	-7.8			-7.3	1	3
1864.0	1872.0	D	23.5	315	1.3	239	179	18.7	18.7		5.7		-.2	1	2
1866.0	1874.0	C	39.0	189	1.2	238	178	18.7	18.7	-9.6	-3.2	15.2		2	0
1868.0	1876.0	B	36.2	191	1.1	233	178	18.6	18.6	-8.5	-3.5	14.7		2	0
1870.0	1878.0	B	38.7	192	1.1	239	179	18.6	18.6	-8.8	-3.7	14.8		2	0
1872.0	1880.0	B	35.7	198	1.0	240	179	18.5	18.5	-4.1			-8.8	1	3
1874.0	1882.0	A	34.7	189	1.1	243	178	18.6	18.6	-8.1	-2.8	12.9		2	0
1876.0	1884.0	B	8.4	65	1.1	244	177	18.8	18.8	-.7			1.5	1	3
1878.0	1886.0	C	45.8	155	1.3	244	176	19.2	19.2		-15.0		-1.3	1	2
1880.0	1888.0	C	45.6	148	1.4	247	176	19.5	19.5		-17.7		-4.4	1	2
1882.0	1890.0	C	43.3	167	1.3	248	176	19.8	19.8	-10.5	-18.6	2.5		1	0
1884.0	1892.0	D	41.2	148	1.3	250	177	19.7	19.7	-3.6			11.5	2	4
1886.0	1894.0	C	33.6	286	1.1	251	177	19.2	19.2	-4.2	-12.5			2	1
1888.0	1896.0	B	41.5	238	1.2	249	178	18.7	18.7	-11.6	-15.0	8.5		2	0
1890.0	1898.0	B	34.6	262	1.1	252	178	18.3	18.3	-8.1	-13.0	1.4		2	0
1892.0	1900.0	D	52.5	215	1.3	256	179	18.3	18.3	-17.3			2.4	2	4
1894.0	1902.0	C	24.7	199	1.2	260	178	18.4	18.4	-2.3			-5.7	1	3
1896.0	1904.0	C	36.2	201	1.0	268	176	18.6	18.6		-5.9		3.2	2	3
1898.0	1906.0	C	57.4	64	1.0	262	174	18.9	18.9	-8.7			18.2	1	3
1900.0	1908.0	C	51.9	201	1.1	258	171	19.3	19.3	-17.2	-12.7			2	1
1902.0	1910.0	B	49.4	205	1.2	248	172	19.6	19.6	-3.2	-19.6	-13.3		1	0
1904.0	1912.0	C	49.2	204	1.2	244	173	19.6	19.6	-16.2	-12.1			2	1
1906.0	1914.0	C	24.0	186	1.1	244	174	19.6	19.6		-8.8		-5.4	1	2
1908.0	1916.0	B	28.8	193	1.0	258	174	19.6	19.6	-3.3	-10.2	-3.9		1	0
1910.0	1918.0	C	24.7	189	1.0	259	173	19.5	19.5	-2.9	-8.7			1	4
1912.0	1920.0	C	24.8	184	1.0	263	174	19.2	19.2	-3.4	-8.8			1	4
1914.0	1922.0	C	51.2	151	1.2	261	175	19.2	19.2	-15.5			-6.3	1	3
1916.0	1924.0	B	39.1	161	1.2	259	176	19.2	19.2	-6.7	3.6	15.1		2	0
1918.0	1926.0	B	38.3	163	1.1	260	175	19.2	19.2	-6.8	2.9	14.8		2	0
1920.0	1928.0	B	24.5	233	1.2	254	174	19.2	19.2	-6.5	-7.9	4.6		2	0
1922.0	1930.0	C	25.4	237	1.2	250	174	19.3	19.3		-4.2		-6.4	1	2
1924.0	1932.0	B	26.8	223	1.2	250	174	19.2	19.2	.7			-7.2	1	3
1926.0	1934.0	B	32.3	223	1.2	256	174	19.1	19.1	.8			-8.8	1	3
1928.0	1936.0	A	44.9	224	1.1	259	172	19.1	19.1	-14.3	-15.5	12.0		2	0
1930.0	1938.0	A	44.7	221	1.2	257	171	19.2	19.2	-14.[illegible]	-15.2	12.4		2	0

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X60

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
1932.0	1940.0	A	44.6	221	1.2	251	171	19.2	19.2	-14.2	-15.2	12.4		2	0
1934.0	1942.0	B	49.1	190	1.2	251	171	18.8	18.8	-14.2			6.6	2	4
1936.0	1944.0	B	26.8	192	1.2	251	171	18.6	18.6		-8.8		-6.3	1	2
1938.0	1946.0	C	35.0	211	1.1	253	170	18.5	18.5	-9.4	-8.8			2	1
1940.0	1948.0	C	37.2	203	1.1	258	170	18.5	18.5	-10.0	-8.0			2	1
1942.0	1950.0	B	36.2	214	1.1	261	170	18.4	18.4	-9.5	-9.8	9.8		2	0
1944.0	1952.0	C	49.3	266	1.2	262	170	18.3	18.3	-10.0			-12.1	2	4
1946.0	1954.0	C	49.6	261	1.1	259	170	18.3	18.3	11.5			-10.8	1	3
1948.0	1956.0	C	49.9	260	1.1	256	169	18.3	18.3	11.5			-11.0	1	3
1950.0	1958.0	B	52.0	255	1.1	256	168	18.3	18.3	-12.8			-11.6	2	4
1952.0	1960.0	C	55.0	3	1.2	258	167	18.4	18.4	15.9	6.6			2	1
1954.0	1962.0	B	46.2	232	1.2	263	167	18.5	18.5	-13.5	-18.1	8.3		2	0
1956.0	1964.0	C	44.6	230	1.1	261	166	18.5	18.5	4.0	-8.0	-17.1		1	0
1958.0	1966.0	B	42.9	232	1.1	265	165	18.5	18.5	4.9	-6.7	-16.5		1	0
1960.0	1968.0	B	57.4	249	1.1	264	165	18.5	18.5		-3.2		-16.7	1	2
1962.0	1970.0	B	32.2	189	1.1	261	164	18.6	18.6	-8.4	-5.2	10.7		2	0
1964.0	1972.0	B	31.9	230	1.1	262	164	18.9	18.9		-4.8		-8.0	1	2
1966.0	1974.0	B	31.6	191	1.1	261	163	19.3	19.3		-10.6		-8.2	1	2
1968.0	1976.0	B	31.3	191	1.2	263	163	19.7	19.7		-10.6		-8.3	1	2
1970.0	1978.0	B	57.9	242	1.3	268	164	19.7	19.7	13.0	-6.4			1	4
1972.0	1980.0	C	27.1	123	1.3	271	164	19.4	19.4		-7.4		-.7	1	2
1974.0	1982.0	C	45.2	110	1.4	277	163	19.1	19.1		14.7		12.8	2	3
1976.0	1984.0	C	45.2	109	1.3	279	162	18.9	18.9		14.5		12.7	2	3
1978.0	1986.0	B	46.7	97	1.3	278	161	18.8	18.8	4.4			12.7	2	4
1980.0	1988.0	B	45.2	107	1.3	274	160	18.7	18.7		14.4		12.6	2	3
1982.0	1990.0	B	44.6	111	1.2	270	158	18.7	18.7	-12.5			.4	1	3
1984.0	1992.0	B	22.9	157	1.2	269	157	18.7	18.6	-3.1	2.3	7.3		2	0
1986.0	1994.0	B	22.5	146	1.3	268	155	18.7	18.6	-4.0	-7.5			1	0
1988.0	1996.0	C	5.4	276	1.4	267	153	18.8	18.5	2.4	1.2	-1.9		1	0
1990.0	1998.0	B	5.2	271	1.4	267	151	18.8	18.6	2.1	1.0	-1.9		1	0
1992.0	2000.0	C	7.7	303	1.4	269	150	18.7	18.6	2.0			.4	1	3
1994.0	2002.0	C	7.7	302	1.4	273	149	18.6	18.7	2.0			.5	1	3
1996.0	2004.0	C	2.0	220	1.4	277	148	18.6	18.7	-.5			-.5	2	4
1998.0	2006.0	B	19.9	26	1.5	279	146	18.7	18.8		3.7		4.6	1	2
2000.0	2008.0	B	19.1	24	1.5	278	144	18.9	19.0		3.6		4.5	1	2
2002.0	2010.0	B	12.3	181	1.6	279	142	19.2	19.3	-2.9	-3.0			2	1
2004.0	2012.0	C	9.0	186	1.6	278	141	19.4	19.5	-2.2	-2.5			2	1
2006.0	2014.0	B	8.9	176	1.6	279	141	19.5	19.7	-1.9	-2.1	2.1		2	0
2008.0	2016.0	B	12.0	178	1.5	284	141	19.5	19.7	-2.6	-2.8	2.9		2	0
2010.0	2018.0	B	14.8	165	1.5	283	142	19.5	19.7	-2.5	-2.4	4.3		2	0
2012.0	2020.0	D	31.3	153	1.5	284	144	19.5	19.7	-4.5			-6.7	1	3
2022.0	2030.0	C	41.3	182	1.6	276	141	19.6	19.6	-12.1	-11.9			2	1
2026.0	2034.0	C	49.1	260	1.5	275	141	19.6	19.6	16.2			-4.6	1	3
2028.0	2036.0	B	55.3	262	1.5	272	141	19.6	19.7		15.7		-4.9	1	2
2030.0	2038.0	C	50.1	35	1.4	274	141	19.6	19.7	14.4			7.7	2	4
2032.0	2040.0	C	32.2	122	1.4	277	141	19.6	19.8	-3.7			7.4	2	4
2034.0	2042.0	D	42.7	29	1.4	278	140	19.6	19.8	11.7			4.9	2	4
2036.0	2044.0	C	51.0	260	1.5	280	140	19.6	19.9		12.9		-4.7	1	2
2038.0	2046.0	C	34.5	307	1.6	279	139	19.6	19.9	8.6	13.9	-3.3		1	0
2040.0	2048.0	C	33.8	310	1.6	276	140	19.6	20.0	8.5	13.5	-2.8		1	0
2042.0	2050.0	C	56.6	299	1.6	274	140	19.6	20.0	8.6	-11.9			2	1
2044.0	2052.0	D	32.2	271	1.6	276	142	19.6	20.0	9.3	8.3			1	4
2046.0	2054.0	C	21.3	151	1.6	278	145	19.6	20.0	-4.2			3.0	2	4
2048.0	2056.0	C	41.7	175	1.7	280	147	19.6	20.0	-11.8			3.2	2	4
2050.0	2058.0	C	24.9	164	1.7	280	149	19.6	20.0		-2.8		2.8	2	3

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL	CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
2052.0	2060.0	C 63.6	313	1.7	281	151	19.6	20.0	13.2	-13.6			2	1
2054.0	2062.0	C 57.9	310	1.7	280	154	19.6	20.0	8.1	-14.0			2	1
2056.0	2064.0	C 63.8	41	1.6	279	159	19.6	20.0	-7.8	18.6			1	4
2058.0	2066.0	C 39.9	178	1.5	276	162	19.5	20.0	-5.2			-10.3	1	3
2060.0	2068.0	D 58.3	143	1.5	273	163	19.4	19.9	-19.5			-9.2	1	3
2064.0	2072.0	C 50.3	294	1.5	272	162	19.3	19.8		16.5		-1.1	1	2
2066.0	2074.0	C 56.3	263	1.5	271	165	19.3	19.7		4.2		-13.4	1	2
2068.0	2076.0	D 47.7	293	1.4	272	171	19.3	19.7	15.5			-3.9	1	3
2070.0	2078.0	D 38.5	72	1.3	271	179	19.2	19.8	-5.1	4.2			1	4
2072.0	2080.0	C 61.4	3	1.3	270	183	19.3	19.9	17.2			-18.1	2	4
2080.0	2088.0	D 57.7	284	1.0	264	182	19.3	19.9	-12.9			-19.0	2	4
2082.0	2090.0	C 65.2	291	1.0	264	184	19.3	19.8		13.0		-14.8	1	2
2086.0	2094.0	D 54.7	331	1.0	264	184	19.3	19.6	3.9			-19.3	2	4
2090.0	2098.0	D 57.7	198	1.0	262	185	19.4	19.8	-18.9			11.5	2	4
2092.0	2100.0	D 49.6	210	1.0	252	187	19.5	19.7	-15.5			5.9	2	4
2094.0	2102.0	C 65.6	294	.9	254	188	19.4	19.6		11.7		-15.7	1	2
2096.0	2104.0	D 47.6	215	.9	254	190	19.4	19.5	-14.5			5.1	2	4
2098.0	2106.0	C 57.8	281	.9	266	192	19.3	19.4	-16.0			-15.7	2	4
2100.0	2108.0	C 66.2	271	1.0	267	193	19.3	19.3	17.5	-9.7			1	4
2102.0	2110.0	C 71.1	30	.9	266	194	19.4	19.3		15.3		-18.7	2	3
2104.0	2112.0	C 67.0	272	.8	265	194	19.4	19.3	18.0	-10.3			1	4
2106.0	2114.0	D 67.0	272	.8	264	194	19.4	19.3	17.9	-10.4			1	4
2108.0	2116.0	C 68.8	269	.9	266	194	19.3	19.2	17.8	-14.3			1	4
2110.0	2118.0	D 54.8	352	1.0	267	195	19.3	19.1		-11.0		-18.0	2	3
2112.0	2120.0	D 47.0	340	1.0	269	196	19.3	19.1		-12.2		-14.6	2	3
2114.0	2122.0	D 53.7	353	1.0	271	196	19.3	19.1	6.9			-17.3	2	4
2116.0	2124.0	D 46.0	303	.9	269	195	19.3	19.2		6.3		-6.9	1	2
2118.0	2126.0	C 28.7	72	.8	270	195	19.3	19.3		9.6		7.1	1	2
2120.0	2128.0	C 60.9	131	.9	269	195	19.4	19.4		-15.4		7.4	1	2
2122.0	2130.0	C 53.1	349	1.0	269	195	19.4	19.5	17.5			5.7	1	3
2124.0	2132.0	C 53.9	134	1.0	267	195	19.4	19.6	4.8			17.9	2	4
2126.0	2134.0	C 27.8	112	.9	263	194	19.5	19.6	4.2			5.7	2	4
2128.0	2136.0	C 37.2	202	.9	261	195	19.5	19.7	-8.5			6.3	2	4
2130.0	2138.0	C 47.7	264	1.0	264	196	19.6	19.8	-14.5			-6.3	2	4
2132.0	2140.0	D 38.4	111	1.0	264	198	19.6	19.8	7.0			8.1	2	4
2134.0	2142.0	C 32.4	24	1.0	262	199	19.5	19.7	6.5			-5.7	2	4
2136.0	2144.0	B 60.5	22	.9	261	199	19.5	19.7	16.0			17.8	1	3
2138.0	2146.0	B 66.2	120	.9	261	198	19.4	19.5		-8.5		16.8	1	2
2140.0	2148.0	C 64.3	130	.9	262	198	19.4	19.4		-14.9		10.8	1	2
2142.0	2150.0	D 55.4	130	.9	263	198	19.3	19.3	7.5			17.9	2	4
2144.0	2152.0	D 33.6	201	.9	260	198	19.2	19.2	-6.9			6.0	2	4
2146.0	2154.0	C 57.9	314	.9	259	198	19.1	19.1		13.7		-7.2	1	2
2148.0	2156.0	C 56.1	268	.9	259	198	19.1	19.1	-18.8			-8.8	2	4
2150.0	2158.0	C 61.5	271	.9	260	198	19.2	19.1	12.1	-10.8			1	4
2152.0	2160.0	C 68.8	39	.9	258	199	19.2	19.2		16.0		-14.5	2	3
2154.0	2162.0	C 52.4	62	.9	255	200	19.2	19.2	17.1	16.2			2	1
2156.0	2164.0	C 54.2	339	.9	252	201	19.2	19.3	.7	-18.2			2	1
2158.0	2166.0	C 59.3	295	.9	253	202	19.2	19.2	-15.8			-17.4	2	4
2160.0	2168.0	C 63.9	274	.9	254	203	19.2	19.2	12.4	-13.7			1	4
2162.0	2170.0	C 67.8	277	.9	253	203	19.2	19.2	16.5	-14.0			1	4
2164.0	2172.0	D 49.2	325	.8	252	203	19.2	19.1	15.3			-3.6	1	3
2166.0	2174.0	D 54.3	21	.8	251	203	19.1	18.9	13.6			12.4	1	3
2170.0	2178.0	C 70.7	274	.9	252	203	19.1	18.8	17.3	-18.5			1	4
2172.0	2180.0	B 70.8	275	1.0	253	203	19.1	18.9	17.9	-18.3			1	4
2174.0	2182.0	C 69.1	276	.9	252	203	19.1	19.0	17.6	-15.7			1	4

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	DIA NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
2176.0	2184.0	D	54.5	359	.9	253	204	19.1	19.0	6.4			-17.6	2	4
2178.0	2186.0	D	68.4	39	.9	253	204	19.1	19.0		11.3		-16.9	2	3
2180.0	2188.0	D	30.7	287	.9	254	205	19.1	19.0		-1.6		-6.5	1	2
2182.0	2190.0	C	26.4	243	.9	254	205	19.0	19.0	-.8			-6.9	1	3
2184.0	2192.0	C	38.7	121	.9	257	205	19.0	18.9	6.5			8.2	2	4
2186.0	2194.0	C	42.7	211	1.0	258	206	19.0	18.9	-9.9			8.0	2	4
2188.0	2196.0	C	44.3	209	1.0	261	206	19.0	18.9	-8.9	-18.9			1	4
2190.0	2198.0	D	29.0	129	1.0	261	206	19.0	18.9		-2.4		3.7	1	2
2192.0	2200.0	C	42.6	203	1.0	258	207	19.0	19.0		-17.8		-8.5	1	2
2194.0	2202.0	C	40.6	333	1.0	256	207	19.1	19.0	-2.0			-11.5	2	4
2198.0	2206.0	C	65.6	51	1.0	254	208	19.2	19.1		15.6		-10.9	2	3
2200.0	2208.0	B	65.1	51	1.0	253	209	19.2	19.0		14.9		-10.9	2	3
2202.0	2210.0	C	64.5	53	.9	252	209	19.2	18.9		15.2		-10.2	2	3
2204.0	2212.0	D	60.7	278	.9	251	210	19.2	18.8	9.3	-13.5			1	4
2206.0	2214.0	D	60.3	278	.9	249	210	19.1	18.8	9.2	-13.1			1	4
2208.0	2216.0	C	59.5	278	1.0	249	209	19.1	18.8	9.2	-12.2			1	4
2214.0	2222.0	D	39.2	357	1.0	251	207	19.0	18.7	2.7			-10.5	2	4
2216.0	2224.0	C	37.6	269	1.0	253	206	19.1	18.8		-13.4		-3.2	2	3
2218.0	2226.0	C	15.1	333	1.0	255	205	19.1	18.8	3.6			-.7	1	3
2220.0	2228.0	C	47.3	54	.9	258	204	19.1	18.9		9.7		-3.9	2	3
2222.0	2230.0	D	41.6	155	.9	257	203	19.2	18.9		-11.4		.4	1	2
2224.0	2232.0	D	40.5	155	.9	257	203	19.2	19.0		-11.3		.2	1	2
2226.0	2234.0	D	8.7	333	.9	259	202	19.3	19.0		1.8		-.3	1	2
2228.0	2236.0	C	44.4	351	.9	258	201	19.3	19.1		16.1		3.2	1	2
2230.0	2238.0	B	51.9	284	1.0	258	201	19.3	19.2		-3.4		-14.2	1	2
2232.0	2240.0	C	55.8	299	.9	255	201	19.4	19.3	-11.5			-15.3	2	4
2234.0	2242.0	C	56.0	270	1.0	254	201	19.4	19.5	-19.4			-8.5	2	4
2236.0	2244.0	C	54.0	42	1.0	254	201	19.4	19.7	10.8			-7.3	2	4
2238.0	2246.0	C	25.5	183	1.0	257	200	19.5	19.8	-3.2			5.7	2	4
2240.0	2248.0	C	33.5	94	1.0	259	199	19.6	19.9	7.7			4.6	2	4
2242.0	2250.0	D	56.5	33	.9	260	199	19.6	19.9	17.5	6.7			2	1
2244.0	2252.0	D	54.9	318	.9	258	200	19.6	19.9	19.2			-6.5	1	3
2246.0	2254.0	D	40.5	156	1.0	258	202	19.5	19.9		-11.7		.1	1	2
2248.0	2256.0	C	44.2	252	1.0	256	203	19.5	19.8		-12.8		-14.0	1	2
2250.0	2258.0	C	55.6	257	1.0	251	203	19.4	19.8	3.4	-17.5			1	4
2252.0	2260.0	C	65.6	273	1.0	250	204	19.5	19.8	13.2	-16.0			1	4
2254.0	2262.0	C	67.1	276	1.0	250	205	19.5	19.9	15.2	-16.0			1	4
2256.0	2264.0	C	42.7	354	.9	253	205	19.5	19.8	12.4	15.1			1	4
2258.0	2266.0	C	41.9	358	.9	257	206	19.5	19.7		15.2		3.4	1	2
2260.0	2268.0	C	41.7	357	1.0	256	207	19.5	19.6		14.8		3.0	1	2
2262.0	2270.0	C	28.4	45	1.0	256	207	19.5	19.6	6.3	3.0			2	1
2264.0	2272.0	B	21.0	185	1.0	254	207	19.4	19.6	-4.9			-2.3	1	3
2266.0	2274.0	C	40.5	7	1.0	253	208	19.4	19.6		15.2		4.4	1	2
2268.0	2276.0	C	57.6	203	1.0	254	209	19.5	19.6	-14.2			17.2	2	4
2270.0	2278.0	C	53.3	193	1.0	251	211	19.5	19.5	-8.7			16.7	2	4
2272.0	2280.0	C	32.3	277	1.0	251	213	19.5	19.4	-8.6	-11.3			2	1
2274.0	2282.0	C	32.0	278	1.0	242	215	19.4	19.3	-8.4	-10.9			2	1
2276.0	2284.0	B	32.5	277	1.0	236	217	19.4	19.4	-8.7	-10.8			2	1
2278.0	2286.0	C	35.3	260	1.0	234	219	19.3	19.5	-10.0	-9.2			2	1
2280.0	2288.0	C	55.6	96	1.0	241	222	19.3	19.6		15.9		19.2	1	2
2282.0	2290.0	C	33.0	256	1.0	244	225	19.4	19.7	-9.0	-6.9			2	1
2284.0	2292.0	C	41.6	225	1.0	244	226	19.5	19.7	-8.9	.2			2	1
2286.0	2294.0	C	28.8	256	1.0	235	226	19.5	19.8	-7.7	-5.6			2	1
2288.0	2296.0	C	68.4	245	1.0	234	225	19.5	19.8		-17.1		15.9	2	3
2290.0	2298.0	C	43.9	285	1.1	233	226	19.5	19.7	-13.4	-16.4			2	1

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
2292.0	2300.0	B	47.8	274	1.2	231	228	19.5	19.7	-15.7	-16.0			2	1
2294.0	2302.0	C	46.1	277	1.1	225	229	19.5	19.7	-14.8	-15.3			2	1
2296.0	2304.0	D	47.7	241	1.1	217	230	19.6	19.8	-13.0	-4.2			2	1
2298.0	2306.0	C	44.4	239	1.0	219	230	19.5	19.8	-11.3	-2.9			2	1
2300.0	2308.0	C	59.2	239	1.1	223	232	19.5	19.8	-18.8	-3.8			2	1
2302.0	2310.0	C	38.8	115	1.0	226	234	19.2	19.6	-3.2			10.5	1	3
2304.0	2312.0	C	18.6	101	1.1	226	239	18.5	19.1	.0			4.3	1	3
2306.0	2314.0	C	42.8	292	1.1	225	245	17.8	18.7	.5			-12.2	1	3
2308.0	2316.0	C	53.3	276	1.1	223	249	17.7	18.9	-16.6	-11.4			2	1
2310.0	2318.0	C	53.2	286	1.1	220	250	18.2	19.3	-17.6	-14.8			2	1
2312.0	2320.0	C	54.4	282	1.1	217	249	18.7	19.5	-18.7	-14.9			2	1
2314.0	2322.0	D	46.2	328	1.2	218	249	19.1	19.5	7.8			-11.8	1	3
2316.0	2324.0	D	41.3	316	1.2	219	251	19.3	19.5	3.9			-11.4	1	3
2318.0	2326.0	C	55.2	250	1.2	222	254	19.3	19.5	-15.5			-13.4	1	3
2320.0	2328.0	C	40.0	272	1.2	222	256	19.3	19.5	-10.3			5.9	2	4
2322.0	2330.0	B	46.3	267	1.2	220	256	19.4	19.6	-12.1			8.3	2	4
2324.0	2332.0	B	44.3	275	1.1	220	256	19.3	19.6	-12.0	-5.9	18.3		2	0
2326.0	2334.0	C	41.5	275	1.1	218	256	19.3	19.5	-11.0	-5.4			2	1
2328.0	2336.0	B	41.4	275	1.1	219	255	19.2	19.3	-10.9	-5.5			2	1
2330.0	2338.0	C	39.5	287	1.2	217	254	19.1	19.2	-11.0			2.5	2	4
2332.0	2340.0	B	40.5	274	1.1	215	253	19.0	19.2	-10.8	-5.6	15.7		2	0
2334.0	2342.0	B	36.6	280	1.2	213	254	19.1	19.3	-9.6	-6.0			2	1
2336.0	2344.0	B	43.0	288	1.2	213	257	19.1	19.5		-15.6		-12.4	1	2
2338.0	2346.0	B	38.8	282	1.3	215	260	19.0	19.6	-10.1			4.5	2	4
2340.0	2348.0	B	37.8	288	1.4	217	263	19.1	19.8	-10.0			3.8	2	4
2342.0	2350.0	C	47.5	262	1.4	219	266	19.2	19.9	-9.8	2.0			2	1
2344.0	2352.0	C	37.2	294	1.5	220	270	19.2	19.9	-9.8			4.0	2	4
2346.0	2354.0	C	40.9	12	1.5	221	271	19.2	19.8		2.6		-6.8	1	2
2348.0	2356.0	B	49.3	357	1.5	221	272	18.5	19.3	9.8	-1.9			1	4
2350.0	2358.0	A	44.6	5	1.6	224	272	18.0	18.5	9.1	.5	-17.5		1	0
2352.0	2360.0	C	39.2	31	1.5	221	272	18.1	18.1	-2.7			-9.5	2	4
2354.0	2362.0	B	5.0	289	1.4	220	275	19.6	19.3	-.4	.0	2.0		2	0
2356.0	2364.0	C	39.8	220	1.5	221	279	20.0	20.6	3.4			12.2	2	4
2358.0	2366.0	C	46.8	231	1.6	225	284	19.8	20.9	2.9			16.1	2	4
2360.0	2368.0	C	50.5	232	1.8	225	288	19.1	20.1	4.0			17.6	2	4
2362.0	2370.0	D	30.4	94	1.7	222	291	19.2	19.5	3.9			-6.6	2	4
2364.0	2372.0	B	51.5	242	1.7	220	293	19.5	19.4	2.0			18.2	2	4
2366.0	2374.0	D	11.0	9	1.6	224	298	19.4	19.4		-1.4		-2.2	1	2
2368.0	2376.0	D	45.7	154	1.8	230	304	19.1	19.4	13.7			-3.2	2	4
2370.0	2378.0	C	47.1	206	1.9	230	311	18.7	19.2	13.2			8.0	2	4
2372.0	2380.0	C	55.2	295	2.1	228	315	18.8	19.2	-7.8			18.1	2	4
2374.0	2382.0	C	52.0	290	2.1	225	318	19.1	19.7	-4.7			17.4	2	4
2376.0	2384.0	C	53.7	291	2.2	225	321	19.2	19.9	-4.4			18.8	2	4
2378.0	2386.0	C	51.6	298	2.1	226	321	19.2	19.4	-6.0			16.5	2	4
2380.0	2388.0	C	59.3	233	2.2	230	322	19.6	19.3	-18.1			17.3	1	3
2382.0	2390.0	C	52.9	284	2.0	232	322	20.1	19.6		17.1		19.4	2	3
2384.0	2392.0	C	69.0	160	1.9	232	322	20.1	20.3		17.1		-17.1	2	3
2386.0	2394.0	C	50.0	280	1.9	231	323	19.6	20.6	.3	18.0			2	1
2388.0	2396.0	C	50.9	283	2.1	235	326	19.2	20.2	.2	18.2			2	1
2390.0	2398.0	B	51.8	285	2.1	235	328	18.8	19.4	-.1	17.9			2	1
2392.0	2400.0	C	52.3	289	2.1	232	329	18.4	18.7		-18.5		-.8	1	2
2394.0	2402.0	A	45.3	292	2.1	231	331	18.4	18.5	-1.7	12.7	14.6		2	0
2396.0	2404.0	B	47.3	290	2.0	232	333	18.4	18.7	-14.7			-.2	1	3
2398.0	2406.0	B	37.7	296	2.1	234	334	19.1	19.5	-.8			10.9	2	4
2400.0	2408.0	B	13.9	272	2.1	235	333	19.9	21.3	1.[illegible]			3.9	2	4

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
2402.0	2410.0	B	59.4	261	2.1	235	334	20.7	22.5		-11.1		14.1	1	2
2404.0	2412.0	B	48.5	277	2.1	235	335	21.2	22.8		-13.0		5.1	1	2
2408.0	2416.0	C	21.4	128	2.2	239	345	20.0	20.7	5.3			1.2	1	3
2410.0	2418.0	C	40.5	155	2.4	240	352	19.0	19.4	5.9	-3.9			2	1
2412.0	2420.0	B	55.1	293	2.4	240	355	18.7	19.0		-12.5		6.7	1	2
2414.0	2422.0	B	57.2	296	2.5	244	357	18.8	19.1		-14.4		6.8	1	2
2416.0	2424.0	C	51.9	297	2.6	247	359	18.9	19.2	5.9			17.4	2	4
2418.0	2426.0	C	35.4	307	2.6	248	360	19.2	20.5	2.3			10.4	2	4
2420.0	2428.0	B	43.8	229	2.5	246	0	19.6	21.0	15.0			1.7	2	4
2422.0	2430.0	B	40.9	242	2.4	246	3	19.9	21.2	13.3			3.8	2	4
2424.0	2432.0	B	53.6	285	2.4	250	8	19.7	21.1	-16.8	-2.8			1	4
2426.0	2434.0	B	64.7	299	2.6	252	11	19.6	21.9		-13.4		17.3	1	2
2428.0	2436.0	B	63.9	301	2.6	253	11	19.6	21.5		-13.6		15.9	1	2
2430.0	2438.0	C	58.4	306	2.6	252	12	19.5	21.4		-12.6		10.9	1	2
2432.0	2440.0	C	57.5	176	2.6	252	14	19.3	20.9	19.7			10.1	1	3
2434.0	2442.0	C	63.2	181	2.7	253	17	19.0	20.1	13.3	-11.1			2	1
2436.0	2444.0	C	49.8	288	2.7	253	21	18.8	19.5	13.5			11.5	2	4
2438.0	2446.0	C	52.3	300	2.7	254	26	18.7	19.1	-13.9	-1.5			1	4
2440.0	2448.0	C	51.2	303	2.7	256	30	18.7	18.8	12.1			12.9	2	4
2442.0	2450.0	C	57.7	300	2.7	257	33	18.7	18.8	-15.0	2.2			1	4
2444.0	2452.0	D	55.4	311	2.7	258	36	18.6	18.8	13.6			15.4	2	4
2446.0	2454.0	C	54.2	291	2.7	258	38	18.6	18.7	17.9			9.0	2	4
2448.0	2456.0	B	52.4	286	2.7	259	40	18.5	18.6	-6.7	10.7			1	4
2450.0	2458.0	A	40.2	277	2.8	259	41	18.4	18.5	-1.8	9.8	14.0		1	0
2452.0	2460.0	A	43.0	283	2.7	260	43	18.4	18.4	12.1	16.0	-9.8		2	0
2454.0	2462.0	C	40.3	281	2.7	262	46	18.4	18.3	11.1	13.8	-9.0		2	0
2456.0	2464.0	C	37.2	300	2.7	261	48	18.4	18.3	9.7	14.0			2	1
2458.0	2466.0	C	36.9	297	2.6	262	50	18.4	18.2	9.9	13.4			2	1
2460.0	2468.0	C	35.0	314	2.6	262	52	18.4	18.1	8.0	15.3	-2.5		2	0
2462.0	2470.0	D	14.3	331	2.6	262	53	18.4	18.1	2.5			2.5	2	4
2464.0	2472.0	C	21.1	181	2.6	262	53	18.5	18.1	.0			-5.1	2	4
2466.0	2474.0	C	20.6	185	2.6	260	53	18.6	18.1	.4			-5.1	2	4
2468.0	2476.0	C	45.7	246	2.6	259	52	18.6	18.2	7.7			12.6	1	3
2470.0	2478.0	C	45.8	245	2.6	258	52	18.6	18.2	7.7			12.6	1	3
2472.0	2480.0	C	45.6	244	2.7	256	51	18.7	18.3	7.7			12.6	1	3
2474.0	2482.0	D	44.5	247	2.7	256	49	18.7	18.5	6.5			12.7	1	3
2476.0	2484.0	C	52.5	307	2.7	256	49	18.6	18.6		5.7		15.4	1	2
2478.0	2486.0	C	47.3	273	2.7	257	49	18.7	18.7	.3			15.6	1	3
2480.0	2488.0	C	47.9	277	2.6	258	50	18.7	18.7	-.3			16.0	1	3
2482.0	2490.0	B	48.3	279	2.6	258	52	18.7	18.7	-1.1	16.1	16.3		1	0
2484.0	2492.0	B	45.4	299	2.6	259	55	18.8	18.7	-4.1	9.4	18.1		1	0
2486.0	2494.0	C	53.3	295	2.6	261	57	18.9	18.7	-4.2	14.7			1	4
2488.0	2496.0	C	40.6	306	2.6	262	59	19.0	18.7	11.5			4.1	2	4
2490.0	2498.0	C	46.5	304	2.6	262	61	19.1	18.8	-4.2			14.4	1	3
2492.0	2500.0	C	45.8	302	2.6	262	63	19.2	18.8	-3.2			14.4	1	3
2494.0	2502.0	C	42.4	68	2.6	260	64	19.2	18.8	-7.5			-8.5	1	3
2496.0	2504.0	D	51.7	322	2.6	260	67	19.2	18.9	15.6			8.3	2	4
2498.0	2506.0	C	44.9	2	2.6	262	69	19.3	19.0	5.5			12.1	2	4
2500.0	2508.0	D	53.6	334	2.6	265	71	19.6	19.4	-11.3			15.7	1	3
2502.0	2510.0	C	29.4	234	2.6	266	74	20.2	20.0		11.8		4.0	1	2
2504.0	2512.0	C	26.7	283	2.5	265	77	20.8	20.5	7.6			-2.8	2	4
2506.0	2514.0	C	43.8	136	2.4	264	80	21.2	20.9	-13.2			-2.8	2	4
2508.0	2516.0	C	23.7	286	2.4	263	84	21.1	20.8	6.6			-3.1	2	4
2510.0	2518.0	D	24.8	60	2.4	264	88	20.3	20.2	-5.8			-1.5	1	3
2512.0	2520.0	B	7.0	2	2.4	266	92	19.5	19.5	1.5			.7	2	4

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL	CORR. GRADE		DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
2514.0	2522.0	B	20.6	244	2.4	268	95	18.8	18.8	1.6	-3.8			2	1
2516.0	2524.0	B	21.6	246	2.3	268	97	18.5	18.3	1.6	-3.9			2	1
2518.0	2526.0	C	47.0	289	2.3	268	99	18.5	18.4	8.7			12.3	1	3
2520.0	2528.0	C	46.9	290	2.3	268	101	18.6	18.4	9.0			12.1	1	3
2522.0	2530.0	B	43.8	288	2.3	268	103	18.7	18.6	8.8			10.5	1	3
2524.0	2532.0	B	43.6	289	2.3	269	104	18.8	18.8	8.8			10.4	1	3
2526.0	2534.0	C	44.6	292	2.3	271	104	19.0	19.3		2.5		-8.8	2	3
2528.0	2536.0	C	42.1	289	2.4	272	105	19.3	20.7	8.9			9.9	1	3
2530.0	2538.0	C	34.0	267	2.4	273	107	19.6	21.8	9.5			4.0	1	3
2532.0	2540.0	C	33.7	274	2.3	274	111	20.2	23.1	9.5			4.6	1	3
2534.0	2542.0	C	36.9	276	2.2	275	114	20.9	23.7		-6.2		-11.1	2	3
2536.0	2544.0	C	37.3	339	2.1	276	117	21.2	23.8	.4			12.5	1	3
2538.0	2546.0	C	39.1	339	2.1	277	120	21.2	24.2	13.2	12.2			2	1
2540.0	2548.0	D	34.5	352	2.0	277	122	21.1	24.6	-1.4			11.4	1	3
2542.0	2550.0	C	46.6	297	2.0	277	124	20.7	24.5	13.3			9.9	1	3
2544.0	2552.0	C	38.8	128	1.9	277	126	20.6	23.6	-7.6	-15.6	-1.2		1	0
2546.0	2554.0	D	45.7	134	1.9	277	128	20.9	23.3	-8.6			-11.5	1	3
2548.0	2556.0	D	48.8	293	1.8	276	130	21.1	22.5	16.3			8.0	1	3
2550.0	2558.0	C	65.4	251	1.7	275	136	20.9	21.8		21.2		-12.6	1	2
2552.0	2560.0	C	47.9	296	1.7	273	143	20.5	20.9	16.3			4.9	1	3
2554.0	2562.0	D	45.6	99	1.7	273	150	19.8	19.7		-12.1		1.3	1	2
2556.0	2564.0	D	51.7	303	1.7	272	154	19.4	19.2	4.2			-17.8	2	4
2558.0	2566.0	C	49.2	291	1.7	273	157	19.2	19.2	16.7			-.5	1	3
2560.0	2568.0	B	33.7	287	1.7	274	159	19.1	19.4		8.4		-1.2	1	2
2562.0	2570.0	A	33.4	286	1.6	272	161	19.2	19.4	10.2	7.5	-11.3		1	0
2564.0	2572.0	B	45.9	292	1.6	272	165	19.2	19.7	-2.3			-14.8	2	4
2566.0	2574.0	B	48.8	288	1.6	269	170	19.4	19.9		10.8		-5.2	1	2
2568.0	2576.0	B	49.1	291	1.5	268	174	19.4	19.9		10.6		-5.5	1	2
2570.0	2578.0	B	48.8	294	1.4	267	176	19.2	19.6		10.4		-5.3	1	2
2572.0	2580.0	B	54.4	294	1.4	268	177	19.4	20.1	-7.1			-19.4	2	4
2574.0	2582.0	C	37.8	286	1.4	267	178	19.7	20.4	-5.5			-10.3	2	4
2576.0	2584.0	B	40.2	297	1.3	262	180	19.9	20.4	-5.0	-16.0	-7.9		2	0
2578.0	2586.0	B	31.6	292	1.3	257	182	19.5	20.1	-3.6	-12.2	-4.0		2	0
2580.0	2588.0	C	22.2	284	1.2	250	184	18.9	20.1		1.2		-3.7	1	2
2582.0	2590.0	B	19.8	283	1.2	252	186	20.0	20.3		.7		-3.5	1	2
2584.0	2592.0	B	27.3	280	1.1	253	185	20.4	20.6	5.0	.6	-11.1		1	0
2586.0	2594.0	B	26.5	282	1.2	255	185	20.8	20.3		1.1		-4.7	1	2
2588.0	2596.0	B	47.2	279	1.2	255	185	19.7	19.7	-10.4			-11.7	2	4
2590.0	2598.0	B	56.1	284	1.2	257	186	19.1	19.7		3.9		-13.2	1	2
2592.0	2600.0	B	52.7	288	1.2	256	187	19.0	19.6	-10.7			-15.5	2	4
2594.0	2602.0	B	52.4	286	1.2	257	187	19.1	19.6		4.0		-11.1	1	2
2596.0	2604.0	B	48.1	291	1.2	251	187	19.0	19.3	-8.2			-13.3	2	4
2598.0	2606.0	B	43.0	293	1.2	253	187	18.9	19.3	11.2	4.7	-17.9		1	0
2600.0	2608.0	B	43.0	299	1.2	249	188	19.0	19.2	-4.9	-17.3	-6.3		2	0
2602.0	2610.0	B	39.4	299	1.2	249	189	18.9	19.4	-4.7	-15.5	-5.1		2	0
2604.0	2612.0	A	39.6	297	1.2	245	189	18.9	19.3	9.9	4.6	-15.7		1	0
2606.0	2614.0	A	42.2	297	1.2	245	190	18.7	19.1	-6.8	-17.0	-5.0		2	0
2608.0	2616.0	B	51.8	300	1.1	249	190	18.6	19.0	-7.8			-15.6	2	4
2610.0	2618.0	B	52.7	300	1.1	249	191	18.5	18.7	-8.1			-15.8	2	4
2612.0	2620.0	B	51.2	299	1.1	250	191	18.4	18.6	-7.9			-14.9	2	4
2614.0	2622.0	C	51.6	298	1.1	247	190	18.3	18.5	-7.9			-14.9	2	4
2616.0	2624.0	C	34.3	44	1.1	247	189	18.8	18.8	1.6			8.6	1	3
2618.0	2626.0	B	45.8	43	1.1	250	188	19.1	19.1	1.7	15.6	10.8		1	0
2620.0	2628.0	B	42.3	48	1.1	248	188	19.3	19.3		10.8		-1.1	2	3
2622.0	2630.0	C	43.6	48	1.1	250	189	19.2	19.4		11.1		-1.3	2	3

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
2624.0	2632.0	C	39.5	260	1.1	248	191	19.2	19.5	4.8			-10.8	1	3
2626.0	2634.0	B	44.6	281	1.2	249	193	19.5	19.9		-1.1		-10.7	1	2
2628.0	2636.0	B	37.0	290	1.2	248	195	19.9	20.0	8.5	.8	-15.5		1	0
2630.0	2638.0	C	39.8	287	1.2	243	196	20.4	20.1		-17.3		-8.7	2	3
2632.0	2640.0	D	54.7	170	1.2	241	197	20.3	19.9	-19.3			-6.8	1	3
2638.0	2646.0	C	63.9	167	1.1	241	196	20.2	20.0	-8.4	19.8			2	1
2640.0	2648.0	C	55.7	173	1.0	242	196	20.3	20.0	-8.4	11.2			2	1
2642.0	2650.0	C	40.8	160	1.0	245	196	20.1	19.8	-2.2	9.8			2	1
2644.0	2652.0	C	28.9	117	1.0	246	197	19.4	19.5	4.1			6.2	2	4
2646.0	2654.0	B	18.4	106	1.1	245	198	18.8	19.3	3.1			3.1	2	4
2648.0	2656.0	C	58.2	301	1.1	241	199	18.5	19.1	-12.2			-18.6	2	4
2650.0	2658.0	B	55.1	292	1.1	240	199	18.4	19.0	14.3	.8			1	4
2652.0	2660.0	A	39.4	296	1.2	242	201	18.4	18.9	-7.3	-15.9	-1.3		2	0
2654.0	2662.0	B	40.2	299	1.2	246	201	18.4	19.2	-7.3	-16.5			2	1
2656.0	2664.0	B	31.8	239	1.2	247	199	18.5	19.4	-8.2	-8.0	9.2		2	0
2658.0	2666.0	B	33.9	235	1.1	247	196	18.9	19.7		-8.6		.8	2	3
2660.0	2668.0	C	48.9	226	1.2	246	194	19.1	19.9	-16.0	-12.9			2	1
2662.0	2670.0	C	37.0	229	1.2	246	193	19.4	20.1		-12.3		-10.8	1	2
2664.0	2672.0	C	21.9	69	1.2	244	192	19.3	20.0		4.0		5.1	1	2
2666.0	2674.0	B	22.9	73	1.3	241	192	18.7	19.7		3.6		5.2	1	2
2668.0	2676.0	B	11.3	171	1.2	240	193	18.4	19.6		-3.7		-1.3	1	2
2670.0	2678.0	A	29.2	120	1.2	239	196	18.7	20.4	-7.5	-2.8	10.7		1	0
2672.0	2680.0	B	26.9	126	1.1	235	200	19.3	20.9	-7.2	-2.9	10.0		1	0
2674.0	2682.0	B	15.5	82	1.1	233	204	20.1	21.1	-1.0			3.7	1	3
2676.0	2684.0	C	32.9	244	1.1	228	207	20.2	20.7	-1.3	-10.9			1	4
2678.0	2686.0	B	37.1	249	1.1	228	209	20.5	21.0	-12.2	-10.5	12.3		2	0
2680.0	2688.0	B	42.2	259	1.1	229	210	20.0	20.6	1.8	-12.3	-14.6		1	0
2682.0	2690.0	C	39.4	272	1.2	228	210	19.5	19.9	3.5			-11.3	1	3
2684.0	2692.0	B	44.8	261	1.2	229	209	18.8	19.0	1.5	-12.2	-15.1		1	0
2686.0	2694.0	B	45.4	343	1.2	226	208	18.7	18.9		12.8		-.4	1	2
2688.0	2696.0	C	53.9	299	1.1	228	208	18.8	19.0		-.1		-13.3	1	2
2690.0	2698.0	C	35.3	31	1.1	230	207	19.1	19.1		12.9		6.9	1	2
2692.0	2700.0	B	27.8	267	1.2	233	206	19.3	19.4		-5.3		-7.2	1	2
2694.0	2702.0	C	32.2	283	1.2	231	204	19.8	20.0		-12.6		-4.8	2	3
2696.0	2704.0	B	47.4	262	1.2	235	203	20.2	20.3	3.9			-15.7	1	3
2698.0	2706.0	C	53.5	258	1.2	235	203	20.0	20.3	3.6			-19.8	1	3
2700.0	2708.0	C	46.3	262	1.2	237	203	19.6	19.5	3.6	-11.0			1	4
2702.0	2710.0	C	54.1	256	1.2	242	201	19.0	18.9	3.1	-16.0			1	4
2704.0	2712.0	C	50.9	186	1.3	244	197	18.9	18.9	-9.8			13.7	2	4
2706.0	2714.0	C	54.3	270	1.3	245	192	19.5	18.7	-16.3			-10.3	2	4
2708.0	2716.0	D	54.6	268	1.3	244	190	20.0	18.6	-16.5			-10.3	2	4
2710.0	2718.0	D	55.5	272	1.2	243	191	20.4	18.7	-16.3			-11.6	2	4
2712.0	2720.0	C	45.7	288	1.2	245	191	20.7	19.4		2.4		-9.0	1	2
2714.0	2722.0	C	58.8	291	1.2	248	192	21.0	20.2	-14.5			-19.7	2	4
2716.0	2724.0	C	35.0	222	1.1	247	193	21.0	20.6	-10.3			3.0	2	4
2718.0	2726.0	B	27.0	229	1.1	248	196	20.8	20.5	-7.6			1.5	2	4
2720.0	2728.0	B	33.7	219	1.1	246	198	20.6	20.5	-9.2			4.0	2	4
2722.0	2730.0	A	34.4	267	1.1	242	201	20.7	20.6	-10.3	-13.3	6.1		2	0
2724.0	2732.0	B	31.9	269	1.1	238	206	20.8	20.7	-9.0	-11.8	6.3		2	0
2726.0	2734.0	B	30.9	277	1.1	230	213	20.6	21.3	-8.9	-11.6	5.9		2	0
2728.0	2736.0	B	30.6	273	1.2	226	219	21.3	21.7	-9.2			-1.4	2	4
2730.0	2738.0	C	52.3	303	1.2	224	225	21.3	21.8		-6.1		-17.0	1	2
2732.0	2740.0	B	43.1	279	1.2	222	228	21.3	21.4	-14.4			-1.2	2	4
2734.0	2742.0	C	44.5	285	1.2	221	232	20.9	21.3	-14.9			-1.8	2	4
2736.0	2744.0	C	51.7	284	1.2	222	236	21.4	21.3	.7			-19.5	1	3

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	DIA NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
2738.0	2746.0	C	47.5	286	1.2	224	240	22.0	21.8	.1			-17.3	1	3
2740.0	2748.0	B	19.3	96	1.2	223	243	21.8	21.0	.9			5.1	1	3
2742.0	2750.0	B	19.2	77	1.3	217	246	20.9	20.5		6.7		4.1	1	2
2744.0	2752.0	B	31.2	301	1.4	216	251	20.2	20.0	1.3	-8.3	-8.9		1	0
2746.0	2754.0	C	52.4	305	1.5	215	258	20.1	20.4	.4	-18.2			1	4
2748.0	2756.0	B	61.3	277	1.6	215	266	20.2	20.7		-6.9		15.3	2	3
2750.0	2758.0	B	59.2	280	1.7	216	271	20.2	20.8		-4.8		15.0	2	3
2752.0	2760.0	B	57.7	284	1.7	219	277	20.7	21.3	-15.1			-18.5	1	3
2754.0	2762.0	B	59.4	293	1.8	222	286	21.0	21.9	-16.1			-20.1	1	3
2756.0	2764.0	C	28.2	242	1.8	223	296	21.1	21.9	1.6	10.2			2	1
2758.0	2766.0	C	49.0	265	2.0	224	305	20.7	21.2		-18.9		-.9	1	2
2760.0	2768.0	C	52.3	260	2.1	226	312	20.6	21.0		-17.2		3.0	1	2
2762.0	2770.0	B	32.7	270	2.2	230	319	20.8	20.8	1.5	11.0	9.1		2	0
2764.0	2772.0	B	23.7	244	2.3	233	324	20.3	19.7	3.9	9.5			2	1
2766.0	2774.0	B	2.2	247	2.3	232	326	19.7	19.2	-.8			.7	1	3
2768.0	2776.0	B	42.6	273	2.4	231	326	19.5	19.6	2.3			13.4	2	4
2770.0	2778.0	A	45.5	278	2.4	229	325	20.1	20.5	.2	16.5	14.3		2	0
2772.0	2780.0	A	33.6	283	2.3	229	324	20.3	20.7	.1	10.2	10.1		2	0
2774.0	2782.0	B	35.3	295	2.3	230	325	20.6	21.0	-11.3	-12.6	8.5		1	0
2776.0	2784.0	D	43.2	290	2.4	232	330	21.0	21.4	-.6			14.7	2	4
2778.0	2786.0	C	23.8	318	2.4	236	337	21.8	22.1		-8.9		-2.4	1	2
2780.0	2788.0	B	46.5	311	2.4	238	344	21.3	21.1		-18.8		-2.8	1	2
2782.0	2790.0	B	57.8	299	2.5	241	352	19.7	19.6		-19.3		3.6	1	2
2784.0	2792.0	B	45.4	293	2.6	242	358	18.9	18.8		-7.7		5.5	1	2
2786.0	2794.0	B	44.7	295	2.6	242	0	18.6	18.6		-7.5		5.2	1	2
2788.0	2796.0	B	51.2	290	2.6	241	359	18.5	18.5	7.6			15.5	2	4
2790.0	2798.0	C	51.5	282	2.6	242	358	18.5	18.4	9.5			14.8	2	4
2792.0	2800.0	C	56.6	181	2.5	241	357	18.5	18.5	15.8	2.3			2	1
2794.0	2802.0	C	60.8	172	2.5	240	357	18.6	18.6	16.2	-2.2			2	1
2796.0	2804.0	C	40.4	216	2.5	240	355	18.7	18.6	12.2			-.7	2	4
2798.0	2806.0	D	42.7	174	2.6	241	354	18.8	18.8	9.3	.7			2	1
2800.0	2808.0	C	65.7	277	2.6	241	352	19.1	19.1		-11.5		17.0	1	2
2802.0	2810.0	C	42.9	214	2.6	241	351	19.5	19.6		14.1		14.0	1	2
2804.0	2812.0	C	6.0	264	2.5	240	349	20.0	20.8	-1.7	.1	3.0		1	0
2816.0	2824.0	C	49.5	292	2.5	241	345	19.0	19.8	3.2			16.8	2	4
2818.0	2826.0	C	67.6	276	2.5	241	344	18.7	20.0		-18.3		16.0	1	2
2820.0	2828.0	D	51.0	305	2.5	241	342	18.5	20.0		-18.4		-1.1	1	2
2822.0	2830.0	D	51.2	300	2.5	239	337	18.4	19.8		-18.5		-1.1	1	2
2824.0	2832.0	D	23.5	154	2.5	238	333	19.2	20.2	4.8	1.1			2	1
2826.0	2834.0	C	42.8	266	2.5	238	330	20.3	21.4	5.0	19.3	8.6		2	0
2828.0	2836.0	B	41.7	267	2.4	239	331	20.9	22.2	4.8	19.4	8.5		2	0
2830.0	2838.0	A	42.0	272	2.4	241	334	20.5	22.3	4.7	19.3	8.7		2	0
2832.0	2840.0	B	34.1	274	2.5	242	341	20.0	21.4		-5.2		4.7	1	2
2834.0	2842.0	B	44.3	300	2.6	243	347	19.8	21.5	-14.4	-13.4	16.6		1	0
2836.0	2844.0	B	47.9	300	2.6	243	351	19.6	20.7		-13.8		2.7	1	2
2838.0	2846.0	C	45.8	305	2.5	242	355	19.5	20.2	2.3			15.0	2	4
2840.0	2848.0	B	46.6	303	2.6	244	360	19.6	21.0	5.0	19.8	11.4		2	0
2842.0	2850.0	B	44.8	301	2.7	245	4	19.6	21.6	5.1	20.4	8.8		2	0
2844.0	2852.0	B	38.6	293	2.8	246	8	19.4	20.7	7.7	17.2	3.7		2	0
2846.0	2854.0	B	38.3	290	2.8	246	8	19.3	20.6	7.9	17.3	2.6		2	0
2848.0	2856.0	B	41.1	289	2.8	246	12	19.1	19.9	8.0	18.6	1.6		2	0
2850.0	2858.0	B	42.6	284	2.8	247	14	19.1	19.5	10.1			9.3	2	4
2852.0	2860.0	C	39.0	290	2.8	248	15	19.3	20.0	8.3			9.0	2	4
2854.0	2862.0	B	39.1	281	2.8	248	16	19.1	19.9	9.7			7.7	2	4
2856.0	2864.0	B	48.9	294	2.8	249	16	18.9	19.7	10.[illegible]			13.3	2	4

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
2858.0	2866.0	B	51.2	295	2.8	248	16	18.6	19.4	11.2			14.6	2	4
2860.0	2868.0	B	49.0	294	2.8	247	16	18.2	18.7	10.4			12.6	2	4
2862.0	2870.0	B	35.0	301	2.8	247	17	18.1	18.6		-2.6		5.5	1	2
2864.0	2872.0	C	36.2	349	2.8	246	17	18.1	18.6	-1.9	7.2			2	1
2866.0	2874.0	D	34.4	37	2.8	247	17	18.2	18.6	-7.2			3.7	2	4
2868.0	2876.0	D	19.1	8	2.8	247	17	18.3	18.7	-2.0			3.6	2	4
2870.0	2878.0	C	60.4	140	2.8	247	17	18.4	18.8		17.8		-4.2	1	2
2872.0	2880.0	C	38.7	186	2.7	247	17	18.5	18.9		15.4		6.5	1	2
2874.0	2882.0	C	34.0	193	2.7	246	17	18.6	19.0	6.8			6.6	1	3
2876.0	2884.0	C	30.9	223	2.7	247	18	18.7	19.2	8.4	5.7			2	1
2878.0	2886.0	C	33.7	304	2.7	247	18	19.0	19.4	-8.1	-2.9			1	4
2880.0	2888.0	C	51.6	24	2.7	247	18	19.2	19.6	-10.4			-12.1	1	3
2882.0	2890.0	C	51.3	278	2.8	248	19	19.5	19.8	15.9			10.5	2	4
2884.0	2892.0	B	41.3	273	2.8	247	19	19.6	19.9	12.4	18.3	-5.4		2	0
2886.0	2894.0	B	41.9	274	2.8	248	20	19.7	20.0	12.5	18.8	-5.5		2	0
2888.0	2896.0	C	40.3	270	2.8	248	21	19.7	20.1	12.1	17.3			2	1
2890.0	2898.0	C	38.3	264	2.8	248	21	19.8	20.1	11.8			3.6	2	4
2892.0	2900.0	C	38.1	265	2.8	248	22	19.9	20.2	-3.7	8.0			1	4
2894.0	2902.0	C	37.2	269	2.8	249	24	19.9	20.3	11.2			4.1	2	4
2896.0	2904.0	C	42.9	266	2.8	250	25	20.0	20.3	13.9			4.4	2	4
2898.0	2906.0	D	43.5	280	2.8	250	27	19.9	20.3	13.2			6.9	2	4
2900.0	2908.0	C	42.6	284	2.8	250	29	19.9	20.3	-6.9	5.7			1	4
2902.0	2910.0	C	39.0	288	2.9	251	30	19.8	20.3		17.3		6.5	2	3
2904.0	2912.0	C	37.9	288	2.9	253	32	19.8	20.3		16.5		5.9	2	3
2906.0	2914.0	C	12.4	270	2.9	253	34	19.8	20.2		3.2		3.8	1	2
2908.0	2916.0	C	27.1	71	2.9	254	36	19.8	20.2		-7.3		-6.3	1	2
2910.0	2918.0	C	39.1	136	2.8	254	37	19.8	20.2		3.4		5.9	1	2
2912.0	2920.0	C	54.6	11	2.9	254	36	19.8	20.2	-5.3			18.1	2	4
2914.0	2922.0	C	57.8	315	2.9	254	36	19.9	20.2	14.7			18.9	2	4
2916.0	2924.0	C	23.3	6	2.9	254	36	19.9	20.3	-.8			5.8	2	4
2918.0	2926.0	D	47.0	281	2.9	254	36	19.9	20.3	15.9			5.6	2	4
2920.0	2928.0	C	49.3	279	2.9	255	37	20.2	20.9	-5.6			17.9	1	3
2922.0	2930.0	C	46.7	333	2.9	255	38	20.6	22.0	6.9			15.3	2	4
2924.0	2932.0	B	52.2	309	2.9	254	39	21.0	23.1	-15.4			16.2	1	3
2926.0	2934.0	B	59.3	326	2.8	253	40	21.3	23.5		-9.4		15.2	1	2
2928.0	2936.0	B	59.7	326	2.8	253	41	21.3	23.4		-9.1		15.6	1	2
2930.0	2938.0	C	53.0	332	2.7	253	42	20.8	22.3	-18.7	-8.6			1	4
2932.0	2940.0	C	58.0	318	2.8	255	45	20.4	21.2	17.4			18.2	2	4
2934.0	2942.0	B	60.0	320	2.9	256	48	20.0	20.6	18.8			18.7	2	4
2936.0	2944.0	B	58.0	306	2.9	256	52	19.3	19.9	-11.5	9.9			1	4
2938.0	2946.0	B	58.5	301	3.0	256	55	19.1	19.6	-8.2	14.9			1	4
2940.0	2948.0	B	55.6	303	3.0	255	58	18.9	19.4	-7.2	13.1			1	4
2942.0	2950.0	D	49.0	67	3.0	254	60	18.9	19.5	-8.5			-10.9	1	3
2948.0	2956.0	B	59.4	307	3.0	258	64	19.9	19.9	-7.5	17.3			1	4
2950.0	2958.0	C	59.0	307	3.0	261	66	20.1	19.9	-6.6	18.0			1	4
2952.0	2960.0	B	58.3	311	3.0	263	69	20.1	19.9	-6.4	17.5			1	4
2954.0	2962.0	B	58.5	315	3.0	264	73	20.0	19.8	-6.4	17.4			1	4
2956.0	2964.0	C	52.5	311	3.0	265	77	20.0	19.9	19.6			2.5	2	4
2958.0	2966.0	C	51.8	291	2.9	265	80	20.1	20.0	19.2	14.2			2	1
2960.0	2968.0	D	52.1	291	2.9	265	81	20.3	20.1	19.4			-5.9	2	4
2964.0	2972.0	B	53.0	297	2.8	265	83	21.4	21.0		16.6		-4.7	2	3
2966.0	2974.0	B	58.2	296	2.8	264	82	21.6	21.6		21.3		-5.3	2	3
2968.0	2976.0	C	54.5	293	2.8	264	79	21.6	21.8		17.9		-5.1	2	3
2972.0	2980.0	C	46.2	296	2.9	263	77	20.8	21.5		15.2		-1.7	2	3
2974.0	2982.0	C	51.8	303	2.9	265	77	21.4	21.7	-.1			21.1	1	3

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
2976.0	2984.0	B	49.4	304	2.9	265	79	22.2	22.6	.3			20.0	1	3
2978.0	2986.0	B	48.3	303	2.8	267	80	22.8	23.3	.9			19.7	1	3
2980.0	2988.0	B	46.6	305	2.8	267	82	23.1	23.7	1.0			18.9	1	3
2982.0	2990.0	C	47.9	306	2.8	266	84	22.8	23.5	1.0			19.4	1	3
2984.0	2992.0	C	59.0	271	2.8	265	86	22.2	23.0		3.6		-18.8	2	3
2986.0	2994.0	D	42.3	82	2.8	265	88	21.8	22.5	-9.9			-8.0	1	3
2988.0	2996.0	C	18.2	31	2.8	268	91	21.3	21.8	1.8	6.0			2	1
2990.0	2998.0	B	57.2	84	2.7	269	94	20.8	21.5		5.2		16.9	2	3
2992.0	3000.0	B	16.4	325	2.7	269	98	20.3	21.1	4.9	4.4	-5.0		2	0
2994.0	3002.0	C	69.8	36	2.7	269	102	20.0	21.0		-19.7		14.3	1	2
2996.0	3004.0	C	68.5	96	2.7	267	106	19.9	20.9	-17.8	8.0			2	1
2998.0	3006.0	C	57.1	117	2.7	267	110	19.8	20.8	-16.0	-4.2			2	1
3000.0	3008.0	C	61.4	281	2.7	270	113	19.8	20.7	15.2	-9.2			2	1
3002.0	3010.0	C	48.1	275	2.6	273	118	19.8	20.7	6.2	-9.8			2	1
3006.0	3014.0	B	42.6	291	2.4	274	127	19.7	20.5		18.8		6.3	1	2
3008.0	3016.0	C	40.7	285	2.3	272	133	19.6	20.3	3.5	-9.0			2	1
3010.0	3018.0	C	53.9	292	2.3	271	138	19.3	20.2	19.5			6.2	1	3
3012.0	3020.0	C	48.8	300	2.2	269	142	19.2	20.1	15.5			6.1	1	3
3014.0	3022.0	B	64.8	156	2.2	267	145	19.1	20.1		-8.6		14.9	2	3
3016.0	3024.0	C	57.1	313	2.1	265	145	19.1	20.1	11.2	-7.8			2	1
3018.0	3026.0	C	37.1	285	2.1	263	146	19.1	20.0	.3	-10.8			2	1
3020.0	3028.0	C	23.6	99	2.1	261	146	19.1	19.8		-5.3		.1	1	2
3022.0	3030.0	D	20.0	95	2.1	259	147	19.1	19.7	.5			4.4	2	4
3024.0	3032.0	C	53.4	234	2.1	258	148	19.1	19.7		-1.6		-15.0	1	2
3026.0	3034.0	D	21.2	217	2.2	257	149	19.2	19.7		-2.6		-5.2	1	2
3028.0	3036.0	C	13.2	195	2.2	257	150	19.2	19.7	-3.5			-.5	2	4
3030.0	3038.0	C	43.5	196	2.2	256	150	19.2	19.8	-13.8			-1.0	2	4
3032.0	3040.0	C	27.5	193	2.2	255	150	19.2	19.9	-7.5			-.4	2	4
3034.0	3042.0	D	28.5	5	2.2	255	151	19.4	20.0		8.8		7.0	1	2
3036.0	3044.0	D	54.4	100	2.2	255	151	19.5	20.2	-18.2			1.9	1	3
3040.0	3048.0	B	41.6	289	2.2	256	150	19.9	20.9	13.7			.4	1	3
3042.0	3050.0	B	40.6	320	2.2	256	149	20.3	21.3	10.7	17.7			1	4
3044.0	3052.0	B	18.3	53	2.1	256	150	20.8	21.8	3.6			2.6	2	4
3046.0	3054.0	B	6.9	326	2.1	256	151	21.8	21.7	.9			-1.9	2	4
3048.0	3056.0	B	46.1	297	2.0	257	153	22.1	21.1	2.7			-16.7	2	4
3050.0	3058.0	C	48.4	288	2.0	257	154	22.0	20.4	17.9			.1	1	3
3052.0	3060.0	B	48.9	285	2.0	255	155	21.2	20.0	-1.9	-18.8	-16.4		2	0
3054.0	3062.0	C	50.3	288	2.0	254	156	20.8	20.8		17.4		-1.4	1	2
3056.0	3064.0	D	53.0	287	1.9	251	157	21.0	22.0	-2.8			-21.3	2	4
3062.0	3070.0	C	63.4	270	1.9	254	162	21.6	22.2		14.1		-16.0	1	2
3064.0	3072.0	B	53.8	285	2.0	255	165	21.8	22.2	-6.4			-21.8	2	4
3066.0	3074.0	C	52.9	286	1.9	255	168	21.7	22.4	-7.0			-21.0	2	4
3068.0	3076.0	C	31.0	293	1.9	253	172	21.7	22.5		6.7		-2.9	1	2
3070.0	3078.0	C	55.6	277	1.9	252	175	21.8	22.0	-13.4			-20.2	2	4
3072.0	3080.0	C	55.8	277	1.9	250	176	22.3	21.5	-13.4			-19.7	2	4
3074.0	3082.0	C	56.1	316	1.9	249	176	22.0	20.9	2.4	-20.8			2	1
3076.0	3084.0	C	34.7	330	1.8	247	176	21.4	20.7		13.2		3.1	1	2
3078.0	3086.0	B	24.6	334	1.9	246	177	20.0	20.3		8.2		1.9	1	2
3080.0	3088.0	B	57.1	282	2.0	247	180	19.4	20.0		6.0		-13.2	1	2
3082.0	3090.0	B	61.3	280	2.1	249	181	19.2	19.8		5.9		-16.3	1	2
3084.0	3092.0	B	49.1	291	2.1	250	181	19.1	19.7	-7.8			-15.1	2	4
3086.0	3094.0	B	51.1	293	2.1	250	182	19.1	19.7	-7.9			-16.4	2	4
3088.0	3096.0	C	55.2	293	2.0	249	182	19.1	19.7	-9.1			-19.1	2	4
3090.0	3098.0	C	63.8	293	2.0	246	182	19.1	19.7		14.4		-12.8	1	2
3092.0	3100.0	C	63.6	294	2.0	245	182	19.1	19.8		14.2		-12.7	1	2

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
3094.0	3102.0	C	61.1	283	2.0	242	183	19.2	19.8		6.0		-15.8	1	2
3096.0	3104.0	C	59.4	281	2.0	242	184	19.5	19.8		4.0		-15.7	1	2
3098.0	3106.0	C	44.3	79	2.0	243	185	19.9	20.0		4.9		11.3	1	2
3100.0	3108.0	C	69.2	201	2.0	243	186	20.0	20.1		-15.8		19.6	2	3
3102.0	3110.0	C	63.6	190	2.0	244	186	19.9	20.2		-3.9		19.1	2	3
3106.0	3114.0	D	59.1	90	1.9	242	185	19.6	19.7		2.3		16.6	1	2
3108.0	3116.0	C	51.5	90	2.0	241	185	19.3	19.7		1.7		12.4	1	2
3110.0	3118.0	C	62.5	280	2.0	239	185	19.2	19.7		2.5		-18.8	1	2
3112.0	3120.0	D	60.9	281	2.0	241	186	19.1	19.7		3.3		-17.1	1	2
3114.0	3122.0	D	62.0	280	2.0	244	186	19.1	19.6		2.5		-18.5	1	2
3116.0	3124.0	D	56.4	264	2.0	246	186	19.1	19.6		-6.4		-18.7	1	2
3118.0	3126.0	D	44.9	108	2.0	245	185	19.2	19.7		-4.5		6.8	1	2
3120.0	3128.0	D	55.9	292	2.0	245	184	19.2	19.7	-10.4			-18.9	2	4
3122.0	3130.0	C	54.6	282	2.0	245	184	19.1	19.6	16.4	3.7			1	4
3124.0	3132.0	C	53.4	280	2.1	247	184	19.0	19.5	-12.7			-15.2	2	4
3126.0	3134.0	C	53.1	278	2.1	247	183	19.1	19.5	-12.7			-14.9	2	4
3128.0	3136.0	B	53.3	277	2.0	245	182	19.2	19.4	-12.7			-14.9	2	4
3130.0	3138.0	C	53.9	277	2.0	244	181	19.4	19.6	-13.1			-15.5	2	4
3132.0	3140.0	D	69.7	165	2.0	243	181	19.6	20.3	-18.4	15.5			2	1
3134.0	3142.0	B	31.9	272	2.0	245	182	19.9	20.5		-.4		-7.1	1	2
3136.0	3144.0	B	36.8	271	2.0	244	182	20.3	21.3	8.5	-.7	-17.0		1	0
3138.0	3146.0	C	27.8	278	1.9	243	182	20.5	20.9		.8		-5.4	1	2
3140.0	3148.0	C	31.9	280	1.9	243	182	20.8	21.4		1.6		-6.2	1	2
3142.0	3150.0	C	22.8	248	1.8	242	183	20.7	21.3	-6.5			-2.4	2	4
3144.0	3152.0	C	37.7	161	1.8	245	185	20.7	21.5	-4.3			10.6	2	4
3146.0	3154.0	C	22.2	284	1.9	241	189	21.0	21.9	-4.6			-4.9	2	4
3148.0	3156.0	C	63.4	273	1.9	239	193	21.0	21.9	18.9	-8.4			1	4
3150.0	3158.0	C	65.9	276	1.9	237	197	21.1	21.9	19.0	-9.0			1	4
3152.0	3160.0	C	64.6	280	1.8	235	201	20.2	21.2	18.8	-8.9			1	4
3154.0	3162.0	D	58.3	300	1.8	235	204	19.6	20.2	-15.3			-18.3	2	4
3156.0	3164.0	C	47.3	272	1.8	232	206	19.0	19.5	-14.7			-5.3	2	4
3158.0	3166.0	B	45.8	275	1.9	231	208	19.0	19.3	-13.7			-5.3	2	4
3160.0	3168.0	B	44.2	276	1.9	233	209	19.1	19.5	-13.1			-5.2	2	4
3162.0	3170.0	C	48.6	273	2.0	231	208	19.3	19.6	-15.7			-5.5	2	4
3164.0	3172.0	C	34.6	278	2.1	232	208	19.4	19.6	-9.3			-4.1	2	4
3166.0	3174.0	C	35.0	277	2.1	232	206	19.6	19.5	-9.3			-4.1	2	4
3168.0	3176.0	D	39.3	290	2.0	234	204	20.2	19.8	-9.4			-7.4	2	4
3170.0	3178.0	C	47.3	294	2.0	236	202	21.2	20.7		.1		-11.6	1	2
3172.0	3180.0	B	18.5	306	1.9	235	200	21.8	21.4	-2.9			-4.4	2	4
3174.0	3182.0	B	16.5	303	1.8	236	200	21.4	21.4	-2.9			-3.7	2	4
3176.0	3184.0	B	57.1	281	1.8	236	202	20.5	20.7	-19.8			-13.2	2	4
3178.0	3186.0	C	57.4	289	1.8	234	204	19.8	20.1	14.7			-17.9	1	3
3180.0	3188.0	B	57.2	291	1.8	235	205	19.5	20.1	14.8	-2.8			1	4
3182.0	3190.0	C	59.1	289	1.8	235	205	19.5	20.1		-4.0		-19.4	1	2
3184.0	3192.0	D	51.5	8	1.8	235	205	19.4	20.1		-7.6		-14.9	2	3
3186.0	3194.0	D	35.1	31	1.8	236	205	19.5	20.2		12.8		6.9	1	2
3188.0	3196.0	D	50.7	356	1.8	236	205	19.4	20.4	3.8	-12.1			2	1
3190.0	3198.0	C	52.5	286	1.8	236	205	19.4	20.2		-4.6		-15.9	1	2
3192.0	3200.0	C	62.9	290	1.8	236	204	19.3	20.1	18.7	-3.5			1	4
3194.0	3202.0	B	62.2	289	1.9	235	204	19.1	19.8	17.8	-3.8			1	4
3196.0	3204.0	B	62.1	289	2.0	236	204	19.2	19.9	17.8	-3.9			1	4
3198.0	3206.0	B	61.4	289	2.0	236	205	19.2	20.0	17.1	-4.1			1	4
3200.0	3208.0	C	70.9	41	2.0	236	205	19.2	20.1		13.7		-17.3	2	3
3202.0	3210.0	C	62.5	280	1.9	235	206	19.2	20.1	14.2	-10.7			1	4
3204.0	3212.0	C	62.0	281	1.8	234	206	19.2	20.1	14.3	-10.0			1	4

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
3206.0	3214.0	D	56.1	294	1.8	233	207	19.2	20.1	-16.4			-14.5	2	4
3208.0	3216.0	D	57.4	288	1.8	233	207	19.3	20.1	-18.8			-13.5	2	4
3210.0	3218.0	D	56.3	290	1.8	233	207	19.3	20.1	-17.7			-13.4	2	4
3212.0	3220.0	C	43.0	266	1.8	232	207	19.5	20.1		-10.1		-13.4	1	2
3214.0	3222.0	C	54.8	101	1.8	231	207	19.7	20.0		6.8		16.6	1	2
3216.0	3224.0	C	68.8	134	1.7	231	207	20.5	20.4		-15.5		17.0	1	2
3218.0	3226.0	C	50.2	315	1.6	231	207	20.9	21.1	15.7	6.9			1	4
3220.0	3228.0	B	30.7	204	1.6	231	208	20.6	21.1	-6.2			6.7	2	4
3222.0	3230.0	C	54.8	299	1.7	233	207	19.9	20.8	-14.8			-15.5	2	4
3224.0	3232.0	B	57.0	276	1.7	233	207	19.2	19.9	9.3	-11.4			1	4
3226.0	3234.0	B	56.8	276	1.7	233	207	19.2	19.6	9.1	-11.1			1	4
3228.0	3236.0	C	59.8	270	1.8	230	207	19.4	20.8	8.9	-15.9			1	4
3230.0	3238.0	C	8.4	256	1.6	232	204	20.2	22.6		-2.4		-2.6	1	2
3232.0	3240.0	B	48.8	170	1.4	236	203	20.6	24.7		-20.5		-2.7	1	2
3234.0	3242.0	C	66.8	268	1.4	239	201	21.0	24.8	17.6	-21.0			1	4
3240.0	3248.0	B	54.8	261	1.7	237	205	19.4	20.1	4.2	-16.5			1	4
3242.0	3250.0	D	46.8	53	1.6	240	205	19.1	20.0	13.2			-3.7	2	4
3244.0	3252.0	B	54.4	257	1.7	240	204	19.2	20.0	3.4	-17.1			1	4
3246.0	3254.0	C	54.9	255	1.7	238	203	19.3	20.1	3.0	-18.0			1	4
3248.0	3256.0	D	29.6	274	1.7	236	202	19.5	20.3	-7.7	-11.4			2	1
3250.0	3258.0	D	40.5	316	1.6	239	202	19.6	20.7		6.3		-5.1	1	2
3252.0	3260.0	C	50.1	322	1.6	243	202	19.6	20.7		11.2		-5.4	1	2
3254.0	3262.0	C	20.8	281	1.7	242	202	19.6	20.7		-1.9		-5.1	1	2
3256.0	3264.0	D	36.9	298	2.0	240	201	19.5	20.2	8.5			-7.3	1	3
3258.0	3266.0	C	39.8	335	2.2	239	199	19.2	20.1	-.6			-11.5	2	4
3260.0	3268.0	C	86.1	307	2.2	239	198	19.0	19.9		15.5		-15.6	1	2
3262.0	3270.0	B	60.9	306	2.0	242	198	18.9	19.7		10.3		-12.4	1	2
3264.0	3272.0	C	35.9	30	1.9	245	197	18.8	19.3		12.6		7.6	1	2
3266.0	3274.0	D	56.1	72	1.8	245	197	18.7	19.2	18.4			3.3	2	4
3268.0	3276.0	D	55.3	56	1.8	243	197	18.7	18.9	17.9			-2.1	2	4
3270.0	3278.0	D	50.9	143	1.8	241	198	18.8	18.8	2.4			16.0	2	4
3272.0	3280.0	C	34.9	307	1.8	241	198	19.1	19.4		3.9		-4.7	1	2
3274.0	3282.0	C	37.2	328	1.8	242	199	19.2	20.6		-12.5		-10.7	2	3
3276.0	3284.0	B	63.8	298	1.8	244	200	19.3	21.0		4.7		-19.9	1	2
3278.0	3286.0	C	48.5	264	1.8	244	202	19.1	20.9	-16.5			-5.6	2	4
3280.0	3288.0	C	65.6	302	1.8	242	203	19.2	20.1		6.5		-19.6	1	2
3282.0	3290.0	C	59.5	289	1.7	240	202	19.3	20.0		-2.5		-18.9	1	2
3284.0	3292.0	C	58.1	115	1.7	236	200	19.3	19.6		-2.8		13.7	1	2
3286.0	3294.0	C	60.3	285	1.7	236	199	19.7	19.7	16.3	-3.4			1	4
3288.0	3296.0	C	57.9	285	1.6	238	199	19.7	20.6	-18.5			-15.7	2	4
3290.0	3298.0	C	58.0	285	1.5	242	200	20.1	21.1	-19.1			-16.0	2	4
3296.0	3304.0	C	65.9	127	1.6	243	203	20.4	21.5		-11.2		16.8	1	2
3318.0	3326.0	C	41.7	39	1.9	241	211	18.7	19.7		2.0		-6.8	2	3
3320.0	3328.0	D	38.0	34	1.9	241	209	18.8	19.8		1.1		-6.4	2	3
3322.0	3330.0	D	67.5	21	1.8	240	208	18.9	19.9	18.4	-5.4			2	1
3324.0	3332.0	D	55.8	0	1.7	238	207	18.9	20.0	5.4	-13.1			2	1
3326.0	3334.0	D	56.1	1	1.6	238	207	19.0	20.2	5.7	-13.2			2	1
3328.0	3336.0	C	56.3	141	1.6	237	208	19.1	20.3		-11.6		8.1	1	2
3330.0	3338.0	C	67.2	141	1.7	236	208	19.1	20.4		-18.1		13.0	1	2
3332.0	3340.0	C	51.2	336	1.7	232	209	19.0	20.5	17.0			-3.4	1	3
3334.0	3342.0	C	50.4	48	1.7	231	209	19.1	20.6		7.5		-6.6	2	3
3336.0	3344.0	D	48.5	47	1.6	230	209	19.2	20.2	13.0			-6.5	2	4
3340.0	3348.0	D	51.6	26	1.6	228	209	19.7	19.2	11.2			-12.3	2	4
3342.0	3350.0	D	51.5	22	1.5	227	208	20.3	19.2	10.6			-13.4	2	4
3344.0	3352.0	D	53.2	20	1.5	228	208	20.8	20.1	11.[illegible]			-14.8	2	4

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	DIA NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
3346.0	3354.0	C	61.0	303	1.5	229	208	21.2	21.2	20.9	3.1			1	4
3348.0	3356.0	C	19.0	322	1.4	228	208	21.6	21.5	-2.2			-4.7	2	4
3350.0	3358.0	B	69.5	285	1.3	229	208	21.6	20.9	21.1	-14.3			1	4
3368.0	3376.0	C	61.8	292	1.4	231	200	22.3	23.6		.7		-22.2	1	2
3380.0	3388.0	C	46.8	243	1.5	227	208	20.5	21.5		-18.8		-16.2	1	2
3384.0	3392.0	D	44.3	353	1.9	234	211	19.6	19.4	12.9	14.4			1	4
3390.0	3398.0	C	67.5	303	1.8	233	200	20.0	20.7		10.8		-19.8	1	2
3392.0	3400.0	C	67.7	273	1.8	235	200	20.0	20.9	18.3	-15.7			1	4
3394.0	3402.0	B	53.2	251	1.8	236	203	19.6	20.5	1.5	-18.7			1	4
3396.0	3404.0	B	69.9	278	1.8	236	206	19.3	20.2	19.0	-18.2			1	4
3398.0	3406.0	C	70.7	138	1.6	236	208	18.9	20.2		-18.9		17.3	1	2
3400.0	3408.0	C	63.9	26	1.5	236	209	18.6	20.3	19.1			16.8	1	3
3402.0	3410.0	C	62.5	24	1.7	236	210	18.6	20.4		-4.1		-18.9	2	3
3410.0	3418.0	C	33.4	176	1.5	233	211	18.9	21.4	-1.4			9.4	2	4
3412.0	3420.0	C	37.3	181	1.5	233	211	19.2	21.6	-2.6			10.7	2	4
3414.0	3422.0	C	44.7	158	1.5	232	210	19.4	21.6	-13.6	-12.4	16.8		1	0
3416.0	3424.0	D	31.9	304	1.4	230	210	19.6	21.7		-13.7		-7.0	2	3
3418.0	3426.0	C	53.5	262	1.4	225	209	19.8	21.6	-20.5			-3.3	2	4
3420.0	3428.0	C	53.6	261	1.3	221	208	19.9	21.6	-20.6			-3.2	2	4
3422.0	3430.0	C	33.0	236	1.3	217	208	20.2	21.6		-12.1		-9.5	1	2
3424.0	3432.0	B	27.9	193	1.3	215	207	20.9	21.6		-11.3		-4.3	1	2
3426.0	3434.0	C	28.7	177	1.2	212	207	21.8	21.6		-10.9		-2.4	1	2
3428.0	3436.0	C	22.5	29	1.2	211	207	22.4	21.6		8.7		4.5	1	2
3430.0	3438.0	B	22.8	276	1.2	211	206	22.2	21.8		-3.6		-6.2	1	2
3432.0	3440.0	C	54.3	40	1.1	213	205	21.8	21.9	17.8			-10.2	2	4
3434.0	3442.0	C	51.5	48	1.0	217	204	21.5	21.9	17.4			-6.2	2	4
3436.0	3444.0	B	57.4	62	1.0	222	203	21.8	22.2		21.3		-2.0	2	3
3438.0	3446.0	B	16.0	340	.9	226	201	22.0	22.3	4.7	4.5			1	4
3440.0	3448.0	B	15.8	80	.9	228	200	22.3	23.0	4.2			1.3	2	4
3442.0	3450.0	B	22.3	287	.8	226	198	22.7	23.6	-5.2			-4.7	2	4
3444.0	3452.0	B	24.6	233	.8	225	197	23.1	23.9	-1.1	-8.9			1	4
3446.0	3454.0	C	51.4	38	.8	227	196	23.6	23.9	18.7			-7.9	2	4
3448.0	3456.0	C	49.9	57	.9	237	193	23.2	23.2	18.8			-.4	2	4
3450.0	3458.0	C	35.2	305	1.0	250	190	22.4	23.1	-4.4			-10.8	2	4
3452.0	3460.0	C	60.3	107	1.2	261	188	20.8	22.6	-21.4			16.1	1	3
3454.0	3462.0	D	72.1	25	1.5	265	188	19.1	22.6		18.6		-17.8	2	3
3456.0	3464.0	C	65.5	304	1.6	266	188	17.8	22.3		18.1		-14.3	1	2
3458.0	3466.0	C	49.6	294	1.6	264	186	17.5	22.4		6.6		-9.9	1	2
3460.0	3468.0	C	25.6	54	1.6	261	185	18.0	22.5	6.4			.9	2	4
3462.0	3470.0	C	24.8	36	1.6	258	187	19.3	22.8	6.0			-1.6	2	4
3464.0	3472.0	D	18.4	228	1.6	254	187	20.4	23.1		-5.4		-5.5	1	2
3466.0	3474.0	D	41.9	303	1.5	255	185	20.9	23.5		8.7		-5.4	1	2
3468.0	3476.0	D	46.1	223	1.5	257	180	21.0	23.6		-16.5		-17.1	1	2
3470.0	3478.0	C	55.0	304	1.5	259	178	21.5	23.6		18.6		-4.9	1	2
3474.0	3482.0	C	59.9	86	1.4	253	182	21.7	24.3	-18.0			21.6	1	3
3476.0	3484.0	C	41.2	101	1.3	247	188	20.9	24.4		-1.3		9.6	1	2
3478.0	3486.0	C	69.8	353	1.2	239	193	20.9	24.4	14.5	-22.6			2	1
3480.0	3488.0	C	33.7	205	1.1	233	196	21.1	23.6		-14.4		-8.6	1	2
3482.0	3490.0	B	34.4	95	1.1	228	197	21.4	23.3	9.0			6.2	2	4
3484.0	3492.0	C	33.4	198	1.1	226	198	21.8	23.3	-7.6			7.3	2	4
3486.0	3494.0	D	29.3	233	1.1	233	195	21.4	23.3	-9.2			.7	2	4
3488.0	3496.0	C	43.8	291	1.3	238	192	21.4	23.5	-9.9			-13.0	2	4
3490.0	3498.0	C	43.6	287	1.4	245	189	20.8	23.5	-10.3			-12.8	2	4
3492.0	3500.0	C	40.3	195	1.5	248	188	20.6	23.6	-10.3			7.6	2	4
3494.0	3502.0	C	35.2	6	1.5	250	189	20.4	23.8	6.3			-7.7	2	4

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	DIA NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
3496.0	3504.0	C	37.5	355	1.5	250	190	20.7	23.6	5.0			-10.1	2	4
3498.0	3506.0	C	35.9	2	1.3	250	189	21.0	23.1	6.1			-8.6	2	4
3500.0	3508.0	B	26.5	88	1.3	246	189	22.1	22.8	6.2			4.4	2	4
3502.0	3510.0	C	26.2	80	1.2	239	187	22.3	23.1	6.6			3.8	2	4
3504.0	3512.0	D	61.4	170	1.2	240	185	22.3	23.8	-14.9	10.6			2	1
3508.0	3516.0	D	69.4	165	1.2	255	187	22.1	23.6	-16.4	22.4			2	1
3510.0	3518.0	C	67.6	164	1.2	257	188	22.6	23.0	-13.9	22.4			2	1
3516.0	3524.0	C	26.0	348	1.0	240	188	22.8	21.5		10.1		3.1	1	2
3518.0	3526.0	B	44.0	307	1.1	242	190	23.7	21.4	14.3	10.0	-18.9		1	0
3520.0	3528.0	B	17.5	66	1.1	251	190	23.8	21.9	4.6			.7	2	4
3522.0	3530.0	B	28.8	7	1.1	256	190	23.2	23.1	5.6			-6.9	2	4
3524.0	3532.0	D	60.4	93	1.2	261	192	22.2	23.7	-17.1	5.3			1	4
3530.0	3538.0	D	27.6	139	1.3	265	194	20.6	22.8		-6.3		1.4	1	2
3532.0	3540.0	C	54.5	318	1.5	263	190	20.1	21.8		17.5		-3.8	1	2
3534.0	3542.0	B	58.1	303	1.6	262	187	19.7	21.1		14.4		-8.8	1	2
3536.0	3544.0	B	64.1	283	1.6	259	185	19.6	20.7		6.0		-19.7	1	2
3538.0	3546.0	C	20.8	261	1.6	258	186	19.4	20.5	-5.2			-3.0	2	4
3540.0	3548.0	B	22.7	260	1.5	257	189	19.4	20.4	-5.8			-2.9	2	4
3542.0	3550.0	B	22.3	274	1.5	257	192	19.4	20.4	-5.1			-3.7	2	4
3544.0	3552.0	C	43.5	261	1.4	257	194	19.4	20.4	-13.1			-5.5	2	4
3546.0	3554.0	C	40.7	291	1.4	254	196	19.5	20.4	9.7			-8.4	1	3
3548.0	3556.0	D	16.9	115	1.4	249	196	19.4	20.4	-3.5	-1.2			1	4
3550.0	3558.0	D	43.2	82	1.4	243	195	19.3	20.3		6.7		11.8	1	2
3552.0	3560.0	D	55.3	60	1.4	242	194	19.1	20.2		18.4		19.1	1	2
3554.0	3562.0	D	64.4	359	1.3	246	194	19.0	20.1	13.3	-10.8			2	1
3556.0	3564.0	C	65.2	358	1.2	250	193	19.0	20.0	13.6	-11.8			2	1
3558.0	3566.0	D	41.4	53	1.1	252	193	19.0	20.0	10.4	5.5			2	1
3560.0	3568.0	D	23.2	58	1.0	250	194	19.0	20.0	5.6	5.7			2	1
3562.0	3570.0	D	29.0	117	.9	251	194	18.8	19.8	-6.4			4.0	1	3
3564.0	3572.0	C	60.6	302	1.0	254	195	18.7	19.5		9.6		-12.3	1	2
3566.0	3574.0	B	47.8	278	1.0	256	196	18.7	19.3		-3.1		-12.4	1	2
3568.0	3576.0	D	66.9	208	1.0	254	197	18.7	19.1		-8.7		17.9	2	3
3570.0	3578.0	D	61.5	222	1.0	250	198	18.6	19.0		-15.1		8.6	2	3
3572.0	3580.0	C	50.0	206	1.0	249	198	18.6	19.0	-13.1			9.5	2	4
3574.0	3582.0	D	56.4	215	1.0	252	198	18.6	19.3	-18.3			9.4	2	4
3576.0	3584.0	C	57.1	274	1.0	256	198	18.8	19.4	-18.8			-11.4	2	4
3578.0	3586.0	C	69.5	213	1.0	259	198	18.9	19.4		-14.5		18.0	2	3
3580.0	3588.0	C	54.1	145	1.0	256	198	19.1	19.4	-18.4			2.6	1	3
3582.0	3590.0	D	54.3	300	1.0	255	199	19.2	19.5	16.3	5.2			1	4
3584.0	3592.0	D	59.7	285	1.0	254	200	19.3	19.7	-19.1			-15.5	2	4
3586.0	3594.0	C	31.5	297	.9	252	201	19.4	19.9	-5.8	-12.5			2	1
3588.0	3596.0	C	66.7	8	.9	247	202	19.5	20.2	15.5	-11.8			2	1
3590.0	3598.0	D	51.0	274	.8	243	203	19.6	20.4	-16.2			-8.2	2	4
3592.0	3600.0	C	39.1	289	.7	243	203	19.7	20.5	7.9	-1.2			1	4
3594.0	3602.0	C	30.4	280	.6	242	202	19.9	20.6	-7.3			-4.7	2	4
3596.0	3604.0	C	54.5	12	.6	242	201	20.0	20.7		-4.9		-16.1	2	3
3598.0	3606.0	D	46.8	164	.6	243	200	20.2	20.7	-15.2	-17.7			1	4
3600.0	3608.0	D	55.0	119	.6	243	199	20.3	20.7	-16.8	-4.9			1	4
3602.0	3610.0	C	57.5	91	.6	238	198	20.4	20.7	19.8			10.8	2	4
3604.0	3612.0	C	52.8	280	.6	236	197	20.5	20.7	-15.6			-11.9	2	4
3606.0	3614.0	C	52.8	280	.6	242	196	20.6	20.8	-15.4			-12.3	2	4
3608.0	3616.0	C	52.0	278	.5	257	195	20.7	20.9	-15.1			-11.9	2	4
3610.0	3618.0	C	53.7	19	.5	258	193	20.8	21.0		2.6		-12.7	2	3
3612.0	3620.0	C	46.9	354	.5	264	191	21.0	21.0	14.0			7.4	1	3
3614.0	3622.0	C	46.5	348	.6	259	188	21.0	20.9	14.[illegible]			6.4	1	3

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
3616.0	3624.0	B	43.0	339	.7	273	185	21.2	20.7	13.2			4.7	1	3
3618.0	3626.0	C	42.3	264	.7	269	181	21.2	20.9	8.6			-10.7	1	3
3620.0	3628.0	C	55.7	163	.7	272	177	21.4	21.3	-18.8			-11.5	1	3
3628.0	3636.0	C	41.1	276	.8	281	177	23.3	22.7	-8.4			-11.7	2	4
3630.0	3638.0	C	46.5	279	.9	281	176	22.4	22.4	-9.8			-15.7	2	4
3640.0	3648.0	D	22.1	135	1.3	280	172	19.7	20.1		-6.2		-.9	1	2
3646.0	3654.0	B	54.6	299	1.6	275	170	20.5	21.5		18.7		-3.2	1	2
3648.0	3656.0	B	54.7	297	1.5	274	172	21.0	21.8		17.4		-4.8	1	2
3650.0	3658.0	C	60.3	290	1.4	273	176	22.1	21.6		16.8		-9.9	1	2
3654.0	3662.0	B	58.5	80	1.2	268	182	23.2	22.5	21.1			13.2	2	4
3656.0	3664.0	C	31.2	342	1.2	269	182	22.1	22.9	3.8			-8.9	2	4
3658.0	3666.0	C	61.2	300	1.2	271	181	20.7	22.5		19.0		-9.2	1	2
3660.0	3668.0	C	60.3	292	1.2	273	181	19.6	21.7		12.4		-12.5	1	2
3662.0	3670.0	C	67.1	290	1.2	275	182	19.6	20.8		15.1		-17.3	1	2
3664.0	3672.0	D	19.4	136	1.2	275	183	19.7	20.4		4.8		4.7	2	3
3666.0	3674.0	D	58.5	130	1.3	276	183	19.7	20.3		-18.9		3.2	1	2
3668.0	3676.0	C	56.5	173	1.3	277	184	19.8	20.3		5.6		17.3	2	3
3670.0	3678.0	C	57.2	303	1.3	276	187	19.8	20.3		13.9		-7.9	1	2
3672.0	3680.0	C	31.0	272	1.3	276	190	19.7	20.4		-1.9		-7.3	1	2
3674.0	3682.0	C	44.7	263	1.2	272	194	19.7	20.6		-7.1		-13.5	1	2
3676.0	3684.0	D	46.8	263	1.2	267	195	19.7	20.7		-8.0		-14.7	1	2
3678.0	3686.0	C	14.8	162	1.2	262	196	19.7	21.2	-.5	2.7	4.5		2	0
3680.0	3688.0	D	63.8	174	1.1	257	197	19.7	21.9	-10.0	17.3			2	1
3682.0	3690.0	C	49.2	280	.9	259	200	19.7	22.5	11.0	-4.4			1	4
3684.0	3692.0	C	59.4	286	.7	250	205	19.8	22.9	16.9	-5.3			1	4
3686.0	3694.0	[illegible]	41.6	357	.5	243	209	20.1	22.7	12.8			2.0	1	3
3688.0	3696.0	[illegible]	9.3	140	.4	234	211	20.5	22.8	-2.3			1.2	1	3
3690.0	3698.0	C	15.7	211	.4	229	212	20.9	23.0	-3.0			3.0	2	4
3692.0	3700.0	[illegible]	17.0	203	.3	226	211	21.3	23.4	-2.8			3.8	2	4
3694.0	3702.0	B	35.8	234	.3	223	210	21.6	23.7	-10.7			3.7	2	4
3704.0	3712.0	D	40.2	289	.5	239	214	21.4	22.9	7.1			-11.8	1	3
3706.0	3714.0	C	38.0	106	.5	244	215	21.0	22.8	-5.7	5.2			1	4
3708.0	3716.0	C	59.3	136	.6	243	216	20.3	22.3		-6.0		15.4	1	2
3710.0	3718.0	C	15.7	228	.7	247	217	19.9	21.5		-5.7		-3.5	1	2
3712.0	3720.0	C	31.6	196	.8	245	217	19.8	20.4		-11.6		-3.6	1	2
3716.0	3724.0	D	37.2	190	.8	255	215	19.8	19.9		-14.0		-4.0	1	2
3718.0	3726.0	D	62.8	318	.9	254	214	19.8	19.8		9.4		-14.3	1	2
3726.0	3734.0	C	18.9	195	.9	239	219	20.2	20.8	-1.9	2.8			2	1
3728.0	3736.0	D	28.7	223	.8	236	220	20.4	20.6	-6.1			5.4	2	4
3730.0	3738.0	C	44.3	247	.7	229	221	20.6	20.1		-18.5		-13.6	1	2
3732.0	3740.0	C	59.0	328	.6	223	222	21.1	19.7		9.2		-11.1	1	2
3734.0	3742.0	D	62.2	192	.6	218	222	21.1	19.6	-8.1	19.1			2	1
3740.0	3748.0	D	38.5	166	.5	232	218	20.2	19.8	-11.2			1.1	1	3
3742.0	3750.0	D	45.6	186	.5	237	217	20.2	19.9		-18.0		-3.8	1	2
3744.0	3752.0	D	61.9	305	.6	238	216	20.3	20.0	18.5			-19.3	1	3
3748.0	3756.0	D	55.5	136	.6	233	214	20.9	20.4	-17.6	-6.3			1	4
3750.0	3758.0	D	51.1	290	.5	242	213	21.1	20.6		-6.3		-15.7	1	2
3752.0	3760.0	C	65.1	229	.5	243	212	21.3	20.4		-12.7		16.1	2	3
3754.0	3762.0	D	41.7	159	.5	249	212	21.2	20.3	-12.9	-11.4			1	4
3760.0	3768.0	C	66.8	293	.8	244	215	20.7	19.3	17.4	-10.3			1	4
3762.0	3770.0	C	60.9	39	.7	247	214	20.6	19.4	19.5			-16.5	2	4
3764.0	3772.0	C	62.3	33	.6	247	212	20.6	19.6	19.4			-18.8	2	4
3778.0	3786.0	D	38.5	270	.7	239	214	21.2	20.5		-9.8		-11.7	1	2
3780.0	3788.0	C	42.0	327	.6	227	216	21.4	20.6		6.7		-5.3	1	2
3782.0	3790.0	C	38.5	330	.5	220	218	21.5	21.9		6.2		-5.0	1	2

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
3784.0	3792.0	B	16.0	45	.5	209	219	21.6	23.6	2.0	5.9	.8		1	0
3786.0	3794.0	C	22.9	228	.5	195	219	21.8	25.2	-3.9			-5.4	1	3
3788.0	3796.0	B	9.8	277	.4	184	219	22.0	26.0	.8			-2.9	1	3
3790.0	3798.0	B	20.0	197	.4	169	219	22.2	26.1	-5.1	-7.6	3.7		1	0
3792.0	3800.0	C	54.9	151	.4	159	219	22.5	26.4	-23.7			11.6	1	3
3794.0	3802.0	C	57.3	353	.4	147	220	22.8	26.7		23.9		-3.0	1	2
3796.0	3804.0	C	9.4	246	.4	137	219	22.9	27.5		-3.4		-2.7	1	2
3798.0	3806.0	B	48.3	276	.4	123	218	23.3	27.7	6.2			-19.9	1	3
3800.0	3808.0	C	48.3	249	.4	105	215	23.9	28.1	-19.8			2.2	2	4
3802.0	3810.0	C	1.0	125	.3	69	211	24.6	28.5	.3			.3	2	4
3804.0	3812.0	D	48.4	236	.2	44	205	25.1	28.7	-3.4	-23.8			1	4
3810.0	3818.0	D	32.1	36	.6	334	187	25.4	27.9	11.3			-2.8	2	4
3812.0	3820.0	C	19.5	357	.8	308	184	25.7	27.5	3.9			-5.4	2	4
3814.0	3822.0	C	58.9	278	.8	298	181	25.8	26.7	-19.8			-25.5	2	4
3816.0	3824.0	C	51.2	83	.9	298	180	25.7	25.9	-13.6	4.0			1	4
3818.0	3826.0	C	23.0	27	1.0	299	179	25.6	24.7	7.2	4.4			2	1
3820.0	3828.0	C	41.0	348	1.2	298	179	25.5	23.8	8.9	-4.5			2	1
3822.0	3830.0	D	51.7	351	1.2	295	180	25.5	23.8	13.7	-5.2			2	1
3824.0	3832.0	C	66.5	260	1.2	288	180	25.4	23.7	23.3	-10.0			1	4
3826.0	3834.0	C	48.2	66	1.1	283	180	25.1	23.8	17.3			6.0	2	4
3828.0	3836.0	B	39.4	45	1.1	275	179	24.9	23.8	13.8			-.3	2	4
3830.0	3838.0	C	40.9	50	1.1	272	180	24.6	24.5	14.5			1.0	2	4
3832.0	3840.0	C	39.1	51	1.0	270	181	25.0	25.4	14.0			1.0	2	4
3834.0	3842.0	C	23.7	149	.9	270	184	25.3	26.3		6.3		7.6	2	3
3836.0	3844.0	C	25.3	175	.8	272	188	25.3	26.6	-4.6			7.0	2	4
3838.0	3846.0	B	13.5	177	.7	269	191	25.1	26.9	-2.4			3.6	2	4
3840.0	3848.0	B	25.4	300	.7	273	192	24.9	27.2	-4.8			-8.2	2	4
3842.0	3850.0	C	64.3	123	.7	275	192	25.1	27.0		-18.2		16.4	1	2
3850.0	3858.0	D	59.3	350	.7	265	186	24.0	27.5	13.1	-12.8			2	1
3852.0	3860.0	D	29.2	64	.7	273	186	23.9	27.5	9.8			2.8	2	4
3854.0	3862.0	C	45.3	223	.7	277	186	23.9	27.7		-17.5		.9	2	3
3856.0	3864.0	C	63.0	209	.8	283	186	23.4	27.5		-22.1		10.2	2	3
3858.0	3866.0	D	65.5	83	.8	277	185	23.1	26.9	-22.6	10.4			1	4
3860.0	3868.0	C	30.8	39	.9	278	186	22.5	27.0		11.2		9.8	1	2
3862.0	3870.0	D	45.3	95	.9	273	186	22.5	27.8		.4		13.8	1	2
3868.0	3876.0	C	47.1	234	.9	271	187	22.9	25.9	-19.0	-21.0			2	1
3870.0	3878.0	C	63.5	185	.9	277	188	23.0	24.5	-22.1	1.8			2	1
3872.0	3880.0	D	63.3	185	1.0	287	188	23.1	25.5	-21.6	2.3			2	1
3874.0	3882.0	C	34.5	356	.9	288	187	23.2	26.6	9.8			6.0	1	3
3876.0	3884.0	C	58.3	313	.9	294	186	23.6	27.6		23.7		-6.5	1	2
3878.0	3886.0	C	52.0	279	.8	295	185	24.0	26.7		2.3		-16.4	1	2
3880.0	3888.0	B	59.1	276	.8	300	185	24.0	25.7		1.2		-21.5	1	2
3882.0	3890.0	C	46.0	289	.9	306	185	23.7	24.6		6.2		-9.7	1	2
3884.0	3892.0	C	28.0	318	.9	307	184	23.1	23.8		8.9		-.3	1	2
3886.0	3894.0	C	29.0	302	1.0	309	183	22.7	23.3		6.5		-2.6	1	2
3888.0	3896.0	C	38.7	295	1.1	305	183	22.6	23.1		7.1		-5.4	1	2
3890.0	3898.0	C	53.5	227	1.2	310	185	22.5	22.5	-21.6	-21.0			2	1
3892.0	3900.0	D	48.9	306	1.2	316	187	22.4	21.7		12.8		-4.9	1	2
3894.0	3902.0	D	41.4	57	1.2	318	189	22.3	20.9		13.3		13.3	1	2
3896.0	3904.0	C	48.6	100	1.2	314	188	22.4	21.1	11.4			11.7	2	4
3898.0	3906.0	C	60.0	272	1.1	305	187	22.9	22.1	-21.2			-18.3	2	4
3900.0	3908.0	C	62.4	15	1.1	303	185	23.7	22.8		6.9		-19.3	2	3
3902.0	3910.0	C	63.1	15	1.1	302	185	23.6	22.7		7.2		-19.7	2	3
3904.0	3912.0	C	65.1	255	1.0	301	186	23.3	21.8	13.6	-18.2			1	4
3906.0	3914.0	D	32.2	298	.9	297	187	22.1	21.0	-3.[illegible]	-12.8	-5.2		2	0

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	DIA NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
3908.0	3916.0	C	39.0	160	.9	298	187	21.9	20.3	-4.2			11.3	2	4
3910.0	3918.0	C	47.3	172	.8	301	188	21.4	20.0	-13.8			-8.2	1	3
3912.0	3920.0	C	35.8	241	.8	306	188	21.0	19.3	1.2			-10.2	1	3
3914.0	3922.0	D	36.4	241	.9	309	187	20.5	19.0	1.4			-10.2	1	3
3916.0	3924.0	D	40.3	203	.9	308	185	19.9	19.0		-15.8		-10.5	1	2
3918.0	3926.0	D	51.6	328	.8	312	181	19.7	19.2		-13.5		-17.5	2	3
3922.0	3930.0	D	54.6	272	.9	314	171	19.6	19.7	16.7	5.6			1	4
3924.0	3932.0	D	56.3	268	1.0	308	170	19.6	19.7	-12.8			-17.3	2	4
3926.0	3934.0	D	59.4	283	1.0	307	168	19.8	19.7		14.8		-8.3	1	2
3930.0	3938.0	D	40.9	239	1.1	314	166	19.4	19.5	-10.5	-16.4			2	1
3932.0	3940.0	D	48.4	42	1.1	316	167	19.1	19.3		12.6		15.2	1	2
3934.0	3942.0	C	45.0	45	1.1	319	168	19.1	19.3		10.6		13.4	1	2
3936.0	3944.0	C	58.0	247	1.0	323	168	19.1	19.3		-5.4		-18.1	1	2
3938.0	3946.0	C	47.0	299	1.0	325	166	19.1	19.4	-.4			-15.1	2	4
3942.0	3950.0	D	34.7	158	1.1	327	163	19.1	19.4	-5.7			6.9	2	4
3944.0	3952.0	C	45.0	146	1.1	331	162	19.2	19.4	-6.2			11.5	2	4
3946.0	3954.0	C	45.2	145	1.2	330	162	19.2	19.5	-6.2			11.6	2	4
3948.0	3956.0	D	47.1	144	1.2	328	160	19.3	19.6	-11.9	-19.0	5.8		1	0
3950.0	3958.0	C	32.7	119	1.2	325	159	19.4	19.8	-.5	8.0			2	1
3952.0	3960.0	C	24.5	86	1.2	327	158	19.5	20.0	-5.4			3.1	1	3
3954.0	3962.0	B	20.7	119	1.2	326	157	19.6	20.2	-.5			5.0	2	4
3956.0	3964.0	B	23.2	81	1.2	328	156	19.8	20.5	-5.1			3.4	1	3
3958.0	3966.0	C	27.0	286	1.2	329	155	20.0	20.9	7.7			-.6	1	3
3960.0	3968.0	B	20.2	231	1.1	327	154	20.1	21.7	2.3	-1.3	-7.8		1	0
3962.0	3970.0	B	21.3	216	1.0	328	153	19.9	22.3	1.3	-3.2	-7.7		1	0
3964.0	3972.0	C	16.8	125	1.1	325	153	19.7	23.1	-4.1			-.7	1	3
3966.0	3974.0	B	9.8	314	1.1	324	152	19.4	23.7	2.2	3.8	-1.3		1	0
3968.0	3976.0	D	7.5	149	1.2	324	151	19.5	23.2		-2.1		-1.1	1	2
3970.0	3978.0	B	17.0	2	1.2	323	150	20.1	22.7	4.6			-1.0	2	4
3972.0	3980.0	B	27.3	333	1.2	323	148	20.8	21.8	6.1	.8			2	1
3974.0	3982.0	B	41.8	284	1.2	322	146	21.7	21.6	.9	-13.2			2	1
3980.0	3988.0	D	55.4	79	1.2	325	142	22.9	23.4	7.5			22.2	2	4
3982.0	3990.0	C	53.0	0	1.2	324	141	22.9	23.9	2.1			22.6	1	3
3984.0	3992.0	B	42.8	334	1.2	324	140	22.7	23.7	13.7	5.5	-21.3		2	0
3986.0	3994.0	C	42.1	325	1.2	320	139	22.6	23.8	9.5			11.7	1	3
3988.0	3996.0	B	33.4	347	1.2	315	139	22.6	23.4	10.5	7.3			2	1
3990.0	3998.0	C	53.8	297	1.2	311	138	22.9	23.3	9.4	-11.8			2	1
3992.0	4000.0	D	19.2	235	1.2	313	140	23.1	23.1	-3.4	-8.1			2	1
3994.0	4002.0	D	41.6	235	1.1	317	142	23.3	22.9	-9.5	-20.4			2	1
3996.0	4004.0	D	61.9	252	1.0	320	145	23.4	22.8		13.3		-14.1	1	2
3998.0	4006.0	C	62.3	143	1.0	318	148	23.0	22.9	-19.1			22.7	2	4
4000.0	4008.0	B	53.8	97	1.1	312	148	22.6	23.0	2.5			21.2	2	4
4002.0	4010.0	B	10.6	76	1.2	304	148	22.2	22.6	1.5			2.3	2	4
4004.0	4012.0	B	16.2	6	1.3	301	149	22.3	22.0		3.6		-1.0	2	3
4006.0	4014.0	B	30.4	193	1.4	299	151	22.6	21.3	-.4			-9.0	1	3
4008.0	4016.0	C	34.5	301	1.4	299	154	22.5	21.0	2.6	-8.4			2	1
4012.0	4020.0	C	54.3	129	1.4	301	159	21.2	21.1	-5.3	13.8			2	1
4014.0	4022.0	B	66.3	151	1.4	300	161	20.5	21.3	-18.0	7.6			2	1
4018.0	4026.0	C	41.5	153	1.3	299	165	20.5	20.9	-6.8	3.5			2	1
4022.0	4030.0	C	61.5	171	1.3	305	168	20.7	20.2	-17.3			-19.3	1	3
4026.0	4034.0	C	67.8	282	1.2	312	171	20.8	20.5		18.9		-15.3	1	2
4028.0	4036.0	C	65.5	280	1.1	314	172	20.7	20.6		14.5		-15.2	1	2
4034.0	4042.0	C	39.2	349	1.1	319	176	21.3	20.7	10.1	17.8			1	4
4048.0	4056.0	D	46.9	43	1.0	335	188	22.4	21.3	3.7	20.1			1	4
4050.0	4058.0	C	67.9	89	1.0	333	191	21.5	21.9	-20.2	11.1			1	4

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL	CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
4064.0	4072.0	C 53.2	56	1.1	327	198	20.2	20.5	19.1			-2.7	2	4
4066.0	4074.0	C 48.0	72	1.1	325	198	20.1	20.5	-1.8	13.2	18.0		1	0
4070.0	4078.0	C 68.8	120	1.1	324	197	20.0	20.4		-10.8		18.9	1	2
4072.0	4080.0	C 62.2	124	1.1	323	196	20.0	20.3		-11.0		12.1	1	2
4074.0	4082.0	C 58.4	125	1.2	322	196	20.0	20.3		-10.5		9.6	1	2
4076.0	4084.0	C 55.9	117	1.1	320	194	20.0	20.2		-6.1		11.0	1	2
4078.0	4086.0	C 45.6	108	1.1	319	194	19.9	20.1		-1.1		9.4	1	2
4080.0	4088.0	D 65.9	131	1.1	319	194	19.8	20.0		-18.6		9.7	1	2
4082.0	4090.0	D 62.2	285	1.1	320	195	19.6	19.9	19.5	-.2			1	4
4084.0	4092.0	D 24.1	239	1.1	320	196	19.6	19.8	-6.3	-6.3			2	1
4086.0	4094.0	C 38.6	159	1.1	321	196	19.6	19.6		-11.9		-1.4	1	2
4092.0	4100.0	C 69.8	178	1.1	320	197	19.6	19.4	-15.7	16.7			2	1
4094.0	4102.0	C 66.5	128	1.1	320	198	19.6	19.4		-14.5		12.7	1	2
4096.0	4104.0	C 44.7	154	1.1	320	199	19.6	19.4		-13.4		-.3	1	2
4098.0	4106.0	C 46.3	146	1.1	321	199	19.6	19.4		-12.0		1.8	1	2
4100.0	4108.0	C 65.8	128	1.0	321	199	19.6	19.4		-13.5		12.7	1	2
4102.0	4110.0	D 32.9	166	1.0	322	198	19.6	19.4	-2.9	6.3	10.5		2	0
4104.0	4112.0	D 13.6	174	1.0	323	197	19.6	19.4	-1.3			2.9	2	4
4106.0	4114.0	D 11.5	204	1.0	326	197	19.6	19.4	-2.3			1.5	2	4
4108.0	4116.0	D 60.7	101	1.0	327	196	19.6	19.5	18.3			15.3	2	4
4116.0	4124.0	C 45.2	52	1.0	333	190	19.9	20.2		15.3		14.3	1	2
4118.0	4126.0	B 38.6	83	1.0	336	188	20.0	20.2		4.5		9.9	1	2
4120.0	4128.0	C 39.7	113	1.0	337	187	20.2	20.2		-4.3		5.8	1	2
4122.0	4130.0	D 20.9	203	.9	338	185	20.3	20.3		-7.1		-4.8	1	2
4124.0	4132.0	C 55.7	4	.9	338	184	20.4	20.8	15.3			-15.7	2	4
4126.0	4134.0	C 55.0	9	.9	339	183	20.6	21.6	15.4			-12.7	2	4
4128.0	4136.0	B 54.5	108	1.0	340	182	20.7	22.6	11.3			18.7	2	4
4130.0	4138.0	C 46.2	325	.9	340	180	20.9	23.5	1.8	-14.7			2	1
4132.0	4140.0	B 50.1	322	.9	340	179	21.2	23.8	1.5	-8.5	-10.2		2	0
4134.0	4142.0	B 22.5	139	.8	341	177	21.3	23.6	-.3			6.3	2	4
4136.0	4144.0	C 42.3	294	.8	341	177	21.6	23.1	-4.7			-14.2	2	4
4138.0	4146.0	C 53.8	180	.8	342	176	22.2	23.3	-15.8			13.6	2	4
4140.0	4148.0	C 39.7	309	.9	340	175	22.5	23.6	-.5			-13.9	2	4
4142.0	4150.0	C 22.5	195	.9	340	175	22.9	23.6	-6.0	-3.4			2	1
4144.0	4152.0	C 61.7	325	.9	338	173	23.3	23.1	9.2	-21.1			2	1
4146.0	4154.0	D 39.3	349	.9	336	172	23.5	22.4	9.4			-10.4	2	4
4154.0	4162.0	C 72.3	144	1.0	335	162	22.6	22.6	-21.2	21.1			2	1
4156.0	4164.0	D 54.7	147	1.1	335	159	22.6	22.7	-11.7	6.5			2	1
4158.0	4166.0	D 40.6	279	1.2	334	155	22.6	23.1	-2.5	-16.6			2	1
4162.0	4170.0	D 30.6	303	1.3	331	148	22.6	23.7	9.4			3.4	1	3
4164.0	4172.0	C 47.3	29	1.3	329	144	22.7	24.3	-6.5	11.1			1	4
4166.0	4174.0	B 33.1	13	1.3	326	141	23.0	24.8		9.7		11.4	1	2
4168.0	4176.0	B 30.9	13	1.3	325	139	23.8	24.8		8.9		10.6	1	2
4170.0	4178.0	B 12.7	339	1.3	323	138	24.2	24.6		5.7		3.9	1	2
4172.0	4180.0	C 62.1	237	1.3	323	137	24.1	23.8		8.5		-17.9	1	2
4174.0	4182.0	C 57.2	145	1.3	323	137	23.4	23.5		-5.4		14.4	2	3
4176.0	4184.0	C 63.7	127	1.4	321	136	22.6	23.0	-17.8	7.0			2	1
4178.0	4186.0	C 40.5	256	1.4	320	138	22.2	22.7	-3.7	-17.2			2	1
4182.0	4190.0	D 51.0	180	1.5	323	141	22.4	22.4	-18.8	-17.2			2	1
4184.0	4192.0	D 32.3	339	1.5	324	141	22.4	22.9	4.9			9.4	1	3
4186.0	4194.0	C 42.3	318	1.5	323	141	22.5	23.0	10.2	-1.1			2	1
4188.0	4196.0	C 30.4	4	1.5	322	141	22.9	23.2	9.9			-.7	2	4
4190.0	4198.0	C 51.7	310	1.5	322	141	23.1	23.4	12.2	-5.9			2	1
4192.0	4200.0	D 58.4	293	1.5	320	142	23.4	23.5	8.0	-19.2			2	1
4194.0	4202.0	C 62.3	243	1.4	320	142	23.7	24.0		9.6		-17.9	1	2

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
4196.0	4204.0	D	60.5	300	1.4	320	142	23.4	24.4	11.8	-16.9			2	1
4206.0	4214.0	D	38.9	320	1.5	318	147	21.9	19.4	10.2			8.3	1	3
4208.0	4216.0	D	26.0	305	1.5	317	148	20.8	19.4	3.1			-6.9	2	4
4210.0	4218.0	D	27.6	304	1.5	317	150	19.8	19.3	2.7			-7.3	2	4
4218.0	4226.0	C	13.3	42	1.5	321	149	20.0	19.6	3.1	4.3			2	1
4220.0	4228.0	C	56.8	318	1.4	321	148	20.1	19.8	13.5			-18.6	2	4
4222.0	4230.0	C	57.3	317	1.4	322	146	20.2	20.4	13.9			-18.9	2	4
4224.0	4232.0	C	48.3	285	1.3	324	145	20.3	21.5		18.3		1.3	1	2
4226.0	4234.0	B	52.3	266	1.2	329	144	20.5	22.7	19.9			-5.5	1	3
4228.0	4236.0	C	22.0	66	1.1	333	145	20.8	23.7	4.0			5.4	2	4
4230.0	4238.0	C	27.3	90	1.0	339	146	21.3	23.9	2.2			8.0	2	4
4232.0	4240.0	C	27.6	79	.9	340	146	21.9	23.3	3.6	11.3			2	1
4234.0	4242.0	B	12.8	298	.8	339	146	22.6	22.7	1.3	-2.3			2	1
4242.0	4250.0	D	43.5	67	.9	335	144	22.8	23.9	9.0			13.2	2	4
4246.0	4254.0	D	62.0	256	1.0	333	144	24.3	23.2		17.6		-11.5	1	2
4258.0	4266.0	D	12.1	321	1.2	322	143	23.4	27.8	2.7			-2.8	2	4
4260.0	4268.0	C	35.7	264	1.2	321	142	23.8	28.9	13.7			-4.1	1	3
4262.0	4270.0	D	25.2	327	1.2	320	141	23.9	30.2		11.8		6.6	1	2
4268.0	4276.0	C	62.4	124	1.2	319	136	22.9	32.5	-14.0			26.9	2	4
4270.0	4278.0	D	67.8	134	1.2	319	135	22.8	32.6	-26.0			26.7	2	4
4274.0	4282.0	C	60.7	55	1.2	318	132	22.4	33.0		-8.2		24.5	1	2
4276.0	4284.0	C	37.7	75	1.2	317	131	22.4	32.5	5.7			15.0	2	4
4278.0	4286.0	B	28.2	64	1.2	316	130	22.6	31.3	-10.8	-4.4	15.4		1	0
4282.0	4290.0	C	60.4	288	1.2	317	128	22.6	30.0	10.2	-18.6			2	1
4284.0	4292.0	C	56.3	282	1.2	317	127	22.1	29.4	25.0			6.4	1	3
4290.0	4298.0	C	59.2	289	1.2	315	124	20.6	24.6	11.8	-11.2			2	1
4292.0	4300.0	C	57.5	303	1.2	315	123	20.9	25.6	17.1			17.3	1	3
4294.0	4302.0	D	54.5	15	1.2	314	122	21.3	26.7	-13.4			23.0	1	3
4300.0	4308.0	C	52.5	312	1.3	311	119	20.6	24.3	17.3	7.1			2	1
4302.0	4310.0	C	52.0	202	1.3	310	119	19.9	22.4	6.3			-7.5	1	3
4304.0	4312.0	C	64.2	225	1.3	310	120	19.6	20.7		11.1		-15.2	1	2
4306.0	4314.0	C	32.2	283	1.4	308	122	19.3	20.1	8.1	12.2			1	4
4308.0	4316.0	C	31.8	226	1.4	308	122	18.9	19.7	-4.3			-7.5	2	4
4310.0	4318.0	C	40.6	234	1.4	307	122	18.8	19.4	-4.4	-15.5			2	1
4312.0	4320.0	B	42.7	234	1.4	306	121	18.8	19.4	-4.7	-16.6			2	1
4314.0	4322.0	C	50.1	143	1.5	304	120	18.9	19.4	-14.2	-8.6			2	1
4316.0	4324.0	C	58.5	280	1.6	304	120	19.0	19.5	9.9	-11.1			2	1
4318.0	4326.0	C	65.1	292	1.6	302	119	19.1	19.7	19.2	-5.5			2	1
4320.0	4328.0	D	59.9	314	1.6	302	119	19.2	20.0		9.9		-12.1	2	3
4322.0	4330.0	D	61.1	208	1.6	300	118	19.4	20.2	18.4	.5			1	4
4324.0	4332.0	C	66.6	313	1.6	298	118	19.5	20.3		12.9		-17.0	2	3
4326.0	4334.0	C	66.5	317	1.7	296	118	19.6	20.2		15.6		-15.3	2	3
4328.0	4336.0	D	47.1	259	1.7	295	119	19.7	20.2	15.8			1.3	1	3
4330.0	4338.0	C	51.5	224	1.7	296	120	19.8	20.3	15.9			-9.2	1	3
4332.0	4340.0	D	64.8	23	1.7	297	120	19.8	20.5	-18.9	5.6			1	4
4334.0	4342.0	C	56.0	150	1.7	299	120	19.9	20.6	-19.5	-15.1			2	1
4336.0	4344.0	C	50.7	264	1.7	298	119	20.0	20.7	3.1	-15.0			2	1
4338.0	4346.0	C	15.4	39	1.7	297	119	20.0	20.8	2.6			3.0	2	4
4340.0	4348.0	C	46.4	78	1.8	297	118	20.1	20.9	-.7	13.8			2	1
4342.0	4350.0	C	60.7	297	1.7	298	118	20.2	21.0		-.2		-19.4	2	3
4344.0	4352.0	C	60.3	293	1.7	298	117	20.3	21.2	17.7	-2.7			2	1
4346.0	4354.0	B	61.7	289	1.7	300	116	20.3	21.7	17.6	-5.2			2	1
4350.0	4358.0	D	15.1	171	1.8	300	114	20.4	22.3		-5.0		-1.3	2	3
4354.0	4362.0	C	45.5	298	1.8	299	114	20.5	21.4	11.9	1.7			2	1
4356.0	4364.0	B	7.0	318	1.8	300	113	20.5	21.0	2.1	1.2			2	1

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
4358.0	4366.0	C	5.6	102	1.9	299	113	20.5	21.0	-.4	.5			2	1
4360.0	4368.0	D	51.1	18	1.9	299	112	20.5	21.1		2.8		14.5	1	2
4362.0	4370.0	C	54.3	294	1.9	298	111	20.5	21.3	14.4			16.0	1	3
4364.0	4372.0	C	56.4	280	1.9	297	110	20.5	22.1	19.4			13.1	1	3
4366.0	4374.0	B	60.1	99	1.8	296	108	20.5	23.0	-19.5			-13.3	1	3
4368.0	4376.0	C	65.5	102	1.8	294	104	20.5	24.2		2.2		21.9	2	3
4370.0	4378.0	D	46.1	342	1.8	292	100	20.5	25.1		10.7		17.2	1	2
4372.0	4380.0	C	12.6	26	1.7	290	95	20.5	25.1	2.2	5.4			2	1
4374.0	4382.0	C	61.4	97	1.7	288	91	20.8	24.6	-19.6	-3.8			2	1
4384.0	4392.0	C	51.2	196	2.0	286	85	19.8	21.1		9.5		-7.4	1	2
4386.0	4394.0	C	45.5	143	2.1	286	84	19.5	20.5		-17.0		-3.8	2	3
4388.0	4396.0	C	40.4	143	2.1	286	83	19.5	20.0	3.4			-10.8	1	3
4390.0	4398.0	C	39.7	150	2.1	284	81	19.5	19.9		-14.9		-5.0	2	3
4392.0	4400.0	C	33.5	150	2.1	284	79	19.5	19.9		-3.6		-7.7	1	2
4398.0	4406.0	C	22.3	127	2.0	282	75	19.7	20.0	-5.2			-.9	2	4
4400.0	4408.0	C	43.8	119	2.0	281	73	19.8	20.2	.5			-12.7	1	3
4402.0	4410.0	C	62.1	78	2.0	281	72	20.0	20.3		-3.7		15.6	2	3
4404.0	4412.0	C	56.7	91	2.0	281	70	20.1	20.4	-8.0			-18.5	1	3
4406.0	4414.0	D	61.8	78	2.0	281	68	20.2	20.5	-14.5			-20.0	1	3
4408.0	4416.0	D	50.8	125	2.0	281	66	20.2	20.6	4.2	-11.9			1	4
4410.0	4418.0	C	41.6	278	2.0	280	64	20.2	20.9	13.6	11.1			2	1
4412.0	4420.0	C	33.2	29	2.0	279	61	20.2	21.3	-2.1	7.9	10.5		2	0
4414.0	4422.0	C	33.2	109	2.0	278	58	20.2	21.7	-9.0	-10.4			2	1
4416.0	4424.0	D	68.3	74	2.0	276	55	20.2	22.1		-16.4		13.7	2	3
4420.0	4428.0	C	48.9	293	2.0	274	48	20.1	22.8		10.9		18.0	1	2
4422.0	4430.0	D	57.2	311	2.0	273	45	20.1	23.4	-17.8	3.0			1	4
4424.0	4432.0	C	28.5	87	2.0	272	43	20.1	23.1	-7.8	-7.9			2	1
4426.0	4434.0	D	52.3	165	2.0	271	40	20.0	22.8		15.1		-4.1	1	2
4432.0	4440.0	C	55.7	299	2.0	269	32	19.9	21.1	17.6			15.4	2	4
4434.0	4442.0	C	36.8	321	2.0	267	29	19.9	21.1	5.1			10.4	2	4
4436.0	4444.0	C	62.6	13	1.9	265	27	19.9	20.8	-13.2	9.7			2	1
4438.0	4446.0	D	54.7	103	1.9	263	24	19.9	20.6	11.1	-4.7			1	4
4440.0	4448.0	C	30.1	337	1.9	260	21	19.9	20.5	.3	8.9	7.9		2	0
4442.0	4450.0	D	51.2	170	1.9	258	16	19.8	20.3		-10.3		-16.5	2	3
4444.0	4452.0	D	44.5	308	1.9	256	13	19.7	20.1		-8.3		5.3	1	2
4446.0	4454.0	D	57.6	79	1.9	254	10	19.8	20.1		-10.4		-19.0	1	2
4454.0	4462.0	D	64.0	162	1.7	249	358	19.8	20.2	14.6	-10.3			2	1
4456.0	4464.0	D	26.9	347	1.7	248	354	19.8	20.3	-3.9			5.9	2	4
4458.0	4466.0	D	43.3	171	1.7	247	352	19.9	20.5		19.0		9.6	1	2
4460.0	4468.0	D	53.3	126	1.7	245	349	20.0	20.5		19.5		.9	1	2
4468.0	4476.0	C	28.0	82	1.5	244	339	19.8	20.2	6.1			-3.7	1	3
4470.0	4478.0	D	30.0	318	1.5	245	337	19.8	20.4	-7.6			-3.3	1	3
4472.0	4480.0	D	48.0	295	1.5	245	335	19.8	20.4	-.8	15.4			2	1
4474.0	4482.0	C	45.6	113	1.4	244	333	19.8	20.2	13.9	15.4			1	4
4476.0	4484.0	C	45.8	101	1.4	244	330	19.7	20.0	-.9			-13.9	2	4
4478.0	4486.0	C	45.7	99	1.4	243	328	19.7	20.0	-.8			-13.9	2	4
4480.0	4488.0	C	46.5	84	1.4	244	326	19.8	20.0	-4.2			-13.6	2	4
4482.0	4490.0	C	48.0	88	1.4	245	324	19.9	20.1	-2.8			-14.8	2	4
4484.0	4492.0	D	47.5	87	1.4	245	321	20.0	20.2	-2.4	-17.0			2	1
4486.0	4494.0	C	53.2	329	1.4	244	318	20.0	20.3		-4.7		10.9	2	3
4488.0	4496.0	C	55.0	332	1.3	240	315	20.0	20.2	-9.6			-17.7	1	3
4490.0	4498.0	D	22.3	182	1.2	240	312	19.9	20.1		6.7		.7	2	3
4494.0	4502.0	D	61.4	29	1.2	243	308	19.7	20.1	14.5	-5.9			1	4
4498.0	4506.0	D	41.7	202	1.1	246	304	19.7	20.1	-7.3			10.8	1	3
4500.0	4508.0	C	56.7	322	1.1	248	302	19.7	20.1	-9.[illegible]			-19.4	1	3

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
4502.0	4510.0	D	68.1	191	1.1	247	300	19.7	20.1	-16.0	16.6			1	4
4508.0	4516.0	C	46.5	235	1.0	248	294	19.7	20.1	-14.9			3.9	1	3
4510.0	4518.0	C	22.5	18	1.0	250	292	19.7	20.1	-4.5			-3.6	2	4
4512.0	4520.0	C	24.4	122	1.0	251	290	19.6	20.1	3.1			5.2	1	3
4520.0	4528.0	C	50.2	119	.8	251	281	19.7	20.0	14.8	7.6			2	1
4524.0	4532.0	C	65.4	292	.7	251	275	19.7	20.0		-12.9		14.7	2	3
4526.0	4534.0	C	54.9	302	.7	253	273	19.7	19.9	-5.5			-19.5	1	3
4530.0	4538.0	C	29.8	169	.7	261	268	19.6	19.9	6.4	11.2			2	1
4532.0	4540.0	D	46.6	112	.7	264	266	19.6	20.0	13.7	9.2			2	1
4534.0	4542.0	D	46.8	149	.7	263	264	19.9	20.0	13.9			5.5	2	4
4536.0	4544.0	D	38.6	57	.7	264	261	20.0	20.0	3.8			-10.4	2	4
4538.0	4546.0	D	61.2	348	.7	266	259	19.9	19.7	17.6	-.9			1	4
4540.0	4548.0	D	69.0	2	.7	271	257	19.5	19.5		12.7		-18.3	1	2
4542.0	4550.0	C	65.2	3	.8	277	255	19.2	19.4		12.7		-13.7	1	2
4544.0	4552.0	D	55.0	102	.8	280	253	19.1	19.4	18.1	13.1			2	1
4546.0	4554.0	D	55.0	163	.8	284	251	19.2	19.4	13.0			14.2	2	4
4548.0	4556.0	C	55.0	164	.9	284	249	19.2	19.4	-14.8			12.3	1	3
4550.0	4558.0	C	53.5	176	.8	288	246	19.2	19.4	-16.6			7.7	1	3
4552.0	4560.0	C	56.8	210	.9	289	244	19.2	19.3	-4.3	16.1			2	1
4554.0	4562.0	B	29.7	54	.8	289	241	19.3	19.3		10.7		4.6	1	2
4556.0	4564.0	C	29.2	148	.9	289	239	19.4	19.3		10.5		5.3	2	3
4558.0	4566.0	B	20.9	123	.9	286	238	19.5	19.3	-1.8			4.7	1	3
4560.0	4568.0	B	23.9	251	.9	290	236	19.6	19.2		-2.6		3.0	2	3
4562.0	4570.0	B	38.0	33	.8	287	234	19.3	19.1		13.9		4.2	1	2
4564.0	4572.0	C	34.1	37	.8	290	232	19.1	19.0		12.3		4.4	1	2
4566.0	4574.0	D	41.5	44	.8	289	230	18.8	18.9		16.3		7.2	1	2
4568.0	4576.0	C	47.7	52	.8	294	228	18.8	18.8	6.8			7.5	1	3
4570.0	4578.0	D	19.6	88	.8	295	226	18.8	18.7	4.5			-.3	2	4
4576.0	4584.0	C	38.5	69	.8	293	221	18.8	18.6	9.8			-3.1	2	4
4578.0	4586.0	C	64.1	16	.9	297	220	18.8	18.6	9.8	-15.8			2	1
4580.0	4588.0	C	69.1	140	.9	296	218	18.7	18.6		-9.9		17.8	1	2
4582.0	4590.0	D	67.1	141	.9	300	217	18.7	18.6		-10.4		15.4	1	2
4586.0	4594.0	D	46.8	253	.9	304	214	18.8	18.9		-15.8		-14.4	1	2
4588.0	4596.0	C	39.7	269	.9	305	213	18.9	19.1		-8.7		-11.2	1	2
4590.0	4598.0	B	21.0	216	.9	305	211	18.9	19.4		-7.2		-4.1	1	2
4592.0	4600.0	C	57.3	285	.9	309	209	19.2	19.6		-7.4		-19.0	1	2
4594.0	4602.0	C	59.3	35	.9	309	207	20.3	20.4		5.0		-14.5	2	3
4596.0	4604.0	B	48.5	16	.9	315	204	21.5	22.0	10.2	-3.9			2	1
4598.0	4606.0	B	9.6	214	.8	321	202	22.5	23.3	-2.3			1.2	2	4
4600.0	4608.0	B	10.2	214	.8	324	200	22.6	24.4	-2.5			1.2	2	4
4602.0	4610.0	C	19.4	261	.8	324	198	22.9	23.9	-5.6			-2.2	2	4
4604.0	4612.0	D	29.5	328	1.0	317	196	22.0	23.3		8.6		-.9	1	2
4606.0	4614.0	B	29.1	303	1.2	314	195	21.4	21.8		4.0		-4.0	1	2
4608.0	4616.0	B	42.2	283	1.3	312	193	19.9	20.2		.5		-9.3	1	2
4610.0	4618.0	B	57.4	282	1.4	312	191	19.6	19.3		.6		-15.5	1	2
4614.0	4622.0	D	55.7	217	1.5	311	189	19.2	19.3	-19.0			5.6	2	4
4616.0	4624.0	D	50.4	215	1.5	311	189	19.1	19.5	-15.6	-10.8			2	1
4620.0	4628.0	D	55.4	70	1.5	309	189	19.1	19.3	-5.0	13.6			1	4
4642.0	4650.0	C	53.6	59	1.5	309	202	18.7	18.7	17.4	14.6			2	1
4644.0	4652.0	C	28.7	141	1.6	311	203	18.7	18.6		-4.7		1.8	1	2
4646.0	4654.0	D	33.8	264	1.5	310	203	18.7	18.6		-6.1		-8.8	1	2
4648.0	4656.0	C	52.1	289	1.5	307	203	18.7	18.6	-13.5			-11.6	2	4
4650.0	4658.0	C	59.2	294	1.4	306	203	18.7	18.6	-16.2			-16.7	2	4
4654.0	4662.0	C	38.3	32	1.4	309	201	18.6	18.6	6.1	14.6			1	4
4656.0	4664.0	B	34.4	32	1.4	309	200	18.6	18.6	7.1	2.1	-12.7		2	0

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X60

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
4658.0	4666.0	B	18.4	46	1.4	311	199	18.6	18.5	1.6			4.0	1	3
4660.0	4668.0	C	19.8	47	1.4	312	198	18.6	18.5	4.4			-1.6	2	4
4662.0	4670.0	C	52.6	135	1.5	314	197	18.6	18.4	4.6			15.5	2	4
4664.0	4672.0	C	54.2	177	1.5	314	196	18.6	18.5	-7.8			15.7	2	4
4666.0	4674.0	C	59.3	122	1.6	314	195	18.6	18.5	-18.3	-8.4			1	4
4674.0	4682.0	D	35.4	252	1.7	312	186	18.9	19.0		-5.2		-9.0	1	2
4676.0	4684.0	D	54.8	199	1.7	312	183	19.0	19.3	-8.6			-16.5	1	3
4678.0	4686.0	C	68.1	159	1.7	313	180	19.2	19.6	-12.7	16.0			2	1
4680.0	4688.0	D	40.4	273	1.7	314	177	19.5	20.0	10.0			-7.8	1	3
4682.0	4690.0	C	67.5	159	1.7	314	176	19.8	20.5	-14.9	12.9			2	1
4684.0	4692.0	B	45.3	295	1.6	316	174	20.3	21.1	15.2			-4.2	1	3
4686.0	4694.0	B	8.0	178	1.6	317	172	21.0	21.8	-1.6			.9	2	4
4688.0	4696.0	B	38.0	290	1.4	319	168	21.8	22.6	-2.9			-12.6	2	4
4690.0	4698.0	C	41.5	289	1.4	320	165	22.4	23.2	-2.9			-14.7	2	4
4692.0	4700.0	C	24.2	278	1.4	319	161	23.2	23.9		5.4		-2.2	1	2
4694.0	4702.0	C	39.6	123	1.5	318	157	23.8	24.4	-2.3			13.2	2	4
4696.0	4704.0	C	38.0	284	1.5	318	152	24.3	24.3	-.4			-14.1	2	4
4704.0	4712.0	C	58.0	321	1.5	313	135	24.4	23.6	19.0			22.4	1	3
4706.0	4714.0	C	61.3	324	1.5	313	132	24.9	23.9		9.7		-18.7	2	3
4716.0	4724.0	C	66.0	201	1.9	308	121	26.4	24.1	21.6	-9.0			1	4
4718.0	4726.0	C	50.1	278	1.9	304	117	26.9	23.3	20.8			11.7	1	3
4720.0	4728.0	C	40.5	287	2.0	301	113	27.5	22.5	13.4			11.6	1	3
4722.0	4730.0	C	66.4	308	2.0	300	110	27.6	21.9		17.1		-24.5	2	3
4724.0	4732.0	C	51.3	323	2.1	300	109	27.5	21.6	23.3	16.2			2	1
4726.0	4734.0	D	47.4	316	2.1	299	108	27.0	21.8	8.0			19.9	1	3
4728.0	4736.0	D	47.0	302	2.2	300	108	26.3	22.0	11.8			17.8	1	3
4730.0	4738.0	D	37.2	305	2.3	299	108	25.9	22.7	7.8			12.8	1	3
4736.0	4744.0	D	50.0	60	2.5	299	107	24.7	23.9		20.5		19.6	2	3
4738.0	4746.0	D	49.1	72	2.6	298	106	24.1	23.7	-18.1			-3.2	1	3
4742.0	4750.0	D	44.0	73	2.7	298	102	22.4	22.8		10.6		14.0	2	3
4744.0	4752.0	C	51.3	353	2.8	297	99	22.3	22.5	-9.5	9.3			1	4
4746.0	4754.0	C	58.7	353	2.8	298	97	22.4	21.9	-13.6	10.0			1	4
4748.0	4756.0	D	58.6	351	2.8	298	93	23.3	21.8	-13.8	9.6			1	4
4750.0	4758.0	D	40.8	313	2.7	298	90	24.3	21.9	15.4			-1.5	2	4
4754.0	4762.0	D	46.1	166	2.7	296	82	24.3	22.6	10.2	-1.8			1	4
4756.0	4764.0	C	27.1	66	2.6	293	79	23.9	22.5	-3.9			7.0	2	4
4758.0	4766.0	C	27.3	44	2.7	292	75	22.5	21.9	-1.3			7.7	2	4
4760.0	4768.0	B	39.1	9	2.7	290	71	21.3	21.0	4.3			11.6	2	4
4762.0	4770.0	B	42.9	16	2.7	289	68	20.3	19.8	2.1			13.0	2	4
4764.0	4772.0	B	44.4	11	2.7	288	66	19.2	19.1	3.0			13.1	2	4
4766.0	4774.0	B	60.8	358	2.7	288	65	19.2	19.1		-12.8		10.3	1	2
4768.0	4776.0	C	13.2	316	2.7	287	66	19.4	19.3	-1.3			3.6	1	3
4770.0	4778.0	C	19.2	94	2.7	288	67	19.6	19.5	-1.4			-3.9	1	3
4772.0	4780.0	B	38.4	344	2.7	288	68	20.3	20.3	7.8	16.9	1.0		2	0
4774.0	4782.0	B	36.9	354	2.8	288	69	21.1	21.3	-9.9			6.5	1	3
4776.0	4784.0	B	31.7	356	2.8	287	68	21.8	22.7	5.5			8.8	2	4
4778.0	4786.0	B	25.5	7	2.7	286	67	23.0	24.0	-7.7	-4.6			1	4
4780.0	4788.0	B	50.9	313	2.5	284	65	23.5	24.5	-8.6	12.6			1	4
4782.0	4790.0	B	13.2	267	2.3	283	63	23.8	24.8	4.5			-1.4	2	4
4784.0	4792.0	C	8.6	238	2.1	281	62	24.5	24.7	2.4			-2.1	2	4
4786.0	4794.0	C	29.6	247	2.0	280	61	24.6	24.6	8.4			-6.4	2	4
4788.0	4796.0	C	59.0	160	1.8	280	61	24.7	25.3		7.1		-16.4	1	2
4790.0	4798.0	D	50.7	67	1.8	281	59	24.6	25.8	-12.3			-16.0	1	3
4800.0	4808.0	C	71.9	57	1.8	265	36	26.1	22.7		-22.4		23.0	2	3
4804.0	4812.0	C	18.0	157	[illegible].9	272	32	25.7	22.7	[illegible]	-5.3			2	1

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
4806.0	4814.0	C	9.0	250	1.9	272	30	25.5	22.4	3.2	3.0			2	1
4808.0	4816.0	C	5.9	331	2.0	274	31	25.5	21.8	.9	2.7			2	1
4810.0	4818.0	C	12.0	152	2.2	274	31	24.8	21.7	.0	-3.2			2	1
4812.0	4820.0	C	35.2	357	2.3	275	30	24.5	21.7	-2.5	9.1			2	1
4814.0	4822.0	C	52.4	359	2.3	276	27	23.3	21.3	-6.4			20.2	2	4
4816.0	4824.0	C	64.9	284	2.4	277	24	22.3	20.9	-19.9	9.5			1	4
4818.0	4826.0	C	50.6	216	2.4	279	16	21.0	20.4	17.1			-7.5	2	4
4820.0	4828.0	C	65.7	259	2.2	278	11	21.3	20.5	-13.9	19.1			1	4
4830.0	4838.0	C	68.3	282	1.9	269	351	19.5	19.4		-19.0		15.6	1	2
4832.0	4840.0	C	50.6	264	1.9	269	349	19.6	19.4		-2.1		11.6	1	2
4836.0	4844.0	D	63.1	137	1.8	269	345	20.7	19.5	8.9	-16.6			2	1
4840.0	4848.0	C	33.9	277	1.7	262	339	20.9	20.0	2.9	12.7			2	1
4842.0	4850.0	C	33.9	270	1.7	261	338	20.9	20.9	4.1			9.7	2	4
4844.0	4852.0	C	48.4	120	1.7	261	337	20.6	20.8	2.4	-13.2			2	1
4846.0	4854.0	C	21.9	35	1.7	259	334	20.4	20.6		-4.1		-5.4	1	8
4848.0	4856.0	C	60.6	50	1.6	255	329	20.3	20.2		-5.6		-19.4	1	2
4850.0	4858.0	D	36.2	16	1.5	253	324	20.3	20.4		-9.1		-10.2	1	2
4856.0	4864.0	D	63.4	196	1.3	255	311	20.9	20.2	-9.7	18.1			1	4
4858.0	4866.0	D	51.4	195	1.2	255	308	20.9	20.1		10.2		17.0	1	2
4860.0	4868.0	D	50.0	261	1.3	258	305	20.6	20.1	-.2	17.7			2	1
4862.0	4870.0	C	50.5	68	1.3	260	301	20.2	20.2		14.0		-2.4	1	2
4864.0	4872.0	D	51.3	250	1.3	261	296	20.2	20.3	.5	19.2			2	1
4866.0	4874.0	C	48.3	36	1.2	259	289	20.2	20.4	-7.7			-13.7	2	4
4868.0	4876.0	C	52.4	33	1.1	259	283	20.5	21.0	-8.0			-16.9	2	4
4872.0	4880.0	D	66.4	247	.8	259	269	21.5	21.0	-14.4	18.7			2	1
4874.0	4882.0	C	45.5	201	.8	264	262	21.5	20.7		18.5		14.7	2	3
4876.0	4884.0	C	61.7	255	.8	270	257	20.9	20.8	-20.5			-19.5	1	3
4878.0	4886.0	C	58.4	262	.8	275	253	20.6	20.8	-14.2			-19.8	1	3
4880.0	4888.0	C	44.9	91	.8	280	248	20.8	20.6	13.2	7.8			2	1
4882.0	4890.0	C	65.3	342	.8	283	244	20.7	20.4		6.4		-19.1	1	2
4884.0	4892.0	B	46.6	130	.8	287	239	20.5	20.4	13.6	19.9	-6.8		2	0
4886.0	4894.0	C	56.2	69	.8	290	236	20.2	20.4	10.9			17.7	1	3
4888.0	4896.0	D	49.2	305	.8	294	232	20.0	20.4	8.2	-7.0			1	4
4890.0	4898.0	C	66.9	70	.9	296	229	19.9	20.7		17.3		-12.5	2	3
4892.0	4900.0	D	54.2	329	.9	298	226	19.9	21.2		6.3		-11.6	1	2
4894.0	4902.0	D	53.5	79	1.0	299	223	19.9	21.2	18.7	16.2			2	1
4896.0	4904.0	C	52.9	76	1.1	299	220	19.9	21.0	18.2	15.7			2	1
4898.0	4906.0	D	47.0	122	1.2	301	216	19.9	20.3		1.4		11.1	1	2
4904.0	4912.0	C	57.6	298	1.3	307	204	19.8	20.2	-15.3			-18.0	2	4
4906.0	4914.0	D	46.2	270	1.3	307	201	19.8	20.0	-13.8			-6.6	2	4
4912.0	4920.0	D	66.9	28	1.4	311	193	19.8	20.0		12.4		-16.6	2	3
4918.0	4926.0	D	40.0	17	1.5	311	188	19.7	19.6		16.7		9.4	1	2
4920.0	4928.0	D	41.8	13	1.5	311	188	19.6	19.6		17.9		9.6	1	2
4922.0	4930.0	D	41.4	15	1.5	311	187	19.5	19.6		17.6		9.7	1	2
4924.0	4932.0	D	54.7	187	1.5	311	187	19.5	19.5	-13.5			13.1	2	4
4926.0	4934.0	D	55.9	192	1.5	311	187	19.5	19.4	-15.4			12.5	2	4
4928.0	4936.0	D	13.1	261	1.5	311	187	19.5	19.3	-2.9			-1.9	2	4
4930.0	4938.0	D	72.3	167	1.5	311	187	19.5	19.1	-17.2	19.0			2	1
4932.0	4940.0	C	69.4	172	1.5	311	188	19.5	19.1	-17.1	12.8			2	1
4934.0	4942.0	C	69.6	171	1.5	311	188	19.5	19.1	-16.9	13.5			2	1
4936.0	4944.0	B	66.9	174	1.5	311	187	19.5	19.0	-16.6	9.1			2	1
4938.0	4946.0	D	70.0	166	1.6	311	185	19.6	19.1	-15.8	15.9			2	1
4944.0	4952.0	C	52.0	40	1.6	311	176	19.8	19.3	17.7	16.7			2	1
4946.0	4954.0	C	68.8	95	1.6	311	173	19.9	19.4		-9.2		18.4	1	2
4948.0	4956.0	C	52.9	36	1.6	310	171	20.0	19.6	.6			18.6	1	3

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBD	HLR	HBR	BASE ARM	M
4950.0	4958.0	C	49.6	124	1.5	310	169	20.0	19.8	-15.7			-.2	1	3
4952.0	4960.0	D	21.1	200	1.6	310	167	20.1	20.0	-.7			-5.3	1	3
4954.0	4962.0	D	43.9	35	1.6	310	165	20.2	20.1	-.7			13.8	1	3
4956.0	4964.0	D	27.9	349	1.7	312	162	20.3	20.2	5.1			6.2	1	3
4958.0	4966.0	C	50.8	342	1.7	312	158	20.4	20.3	12.5			13.8	1	3
4960.0	4968.0	D	41.1	64	1.7	311	154	20.5	20.4	9.0	17.4			2	1
4962.0	4970.0	C	50.4	98	1.7	310	150	20.6	20.6	2.3	18.9			2	1
4964.0	4972.0	C	55.4	98	1.7	309	146	20.7	20.6	1.5			20.1	2	4
4966.0	4974.0	B	16.0	137	1.7	309	142	20.8	20.7	-2.4			2.9	2	4
4968.0	4976.0	B	42.1	279	1.7	308	139	20.9	20.8	1.6			-13.9	2	4
4970.0	4978.0	C	46.0	296	1.8	309	135	20.9	20.9		-7.2		-14.5	2	3
4972.0	4980.0	C	41.4	162	1.8	309	132	21.0	20.9	-2.9	-15.0			1	4
4974.0	4982.0	C	54.5	301	1.8	309	128	21.0	20.9	17.5			13.7	1	3
4976.0	4984.0	C	12.4	190	1.8	308	124	21.1	20.9	1.5			-2.7	1	3
4978.0	4986.0	C	54.1	166	1.9	306	120	21.1	21.2	.8			-19.6	1	3
4980.0	4988.0	C	36.0	185	1.9	304	114	21.1	21.3	-9.3			-5.0	2	4
4982.0	4990.0	C	50.4	107	1.9	302	109	21.3	21.7	-11.4	1.2			2	1
4984.0	4992.0	B	37.9	67	1.9	299	103	21.5	21.6	-1.4	9.8			2	1
4986.0	4994.0	C	41.8	350	2.0	297	97	21.7	21.8	12.8			6.4	2	4
4988.0	4996.0	C	35.3	330	2.0	294	91	21.7	21.9	-2.5	8.8			1	4
4990.0	4998.0	C	40.2	315	2.0	292	86	21.8	21.4	13.7			.7	2	4
4992.0	5000.0	C	26.4	302	2.0	290	81	21.4	21.2	8.1			-.6	2	4
4998.0	5006.0	C	32.6	274	2.1	284	65	20.1	20.2	9.5			-2.6	2	4
5000.0	5008.0	C	55.6	322	2.1	283	59	19.9	20.2	-13.5	4.0			1	4
5004.0	5012.0	D	43.3	351	2.1	279	46	20.2	20.1		16.2		13.5	2	3
5008.0	5016.0	D	68.0	320	2.1	276	32	20.5	20.6		-16.1		18.3	1	2
5010.0	5018.0	C	58.6	192	2.1	271	19	20.3	21.0	11.2	-9.8			2	1
5012.0	5020.0	C	54.1	177	1.9	267	11	21.9	20.5	11.6	-6.4			2	1
5014.0	5022.0	C	53.2	166	1.9	266	2	23.4	20.0	11.7	-6.5			2	1
5016.0	5024.0	C	53.9	155	1.8	260	350	22.4	20.2	11.6	-6.3			2	1
5018.0	5026.0	C	42.9	124	1.6	251	339	20.5	20.1	12.6			2.7	1	3
5020.0	5028.0	C	28.3	286	1.4	245	332	19.9	20.1	-7.9			.4	1	3
5022.0	5030.0	C	57.7	138	1.3	242	326	19.9	20.1	13.5	-3.9			2	1
5024.0	5032.0	C	54.0	56	1.2	238	321	20.0	20.2		2.3		-12.1	1	2
5026.0	5034.0	C	53.2	48	1.1	234	315	20.0	20.4		1.1		-12.5	1	2
5030.0	5038.0	D	42.1	347	.9	229	305	19.8	20.3		-13.5		-12.6	1	2
5032.0	5040.0	D	39.0	338	.8	222	300	19.8	20.1		-12.7		-11.1	1	2
5034.0	5042.0	D	38.5	330	.8	224	295	19.9	20.1		-13.0		-10.9	1	2
5036.0	5044.0	C	57.7	124	.7	225	290	19.9	20.1	19.3	8.4			2	1
5038.0	5046.0	C	37.6	354	.7	226	286	19.9	20.1		-5.6		-9.9	1	2
5040.0	5048.0	C	54.9	201	.6	221	282	19.9	20.1	-16.8	-4.9			1	4
5042.0	5050.0	C	60.2	184	.6	217	277	19.9	20.1	-16.7			19.0	1	3
5044.0	5052.0	C	59.7	179	.5	219	272	19.9	20.1	-16.5			18.4	1	3
5046.0	5054.0	C	57.4	176	.5	218	267	19.9	20.1	-15.6			16.3	1	3
5048.0	5056.0	C	53.9	177	.4	220	262	19.9	20.1	12.7			15.1	2	4
5050.0	5058.0	C	52.2	170	.3	224	258	19.9	20.1	12.7			13.5	2	4
5052.0	5060.0	C	56.0	149	.3	233	254	19.9	20.2	18.3			10.8	2	4
5054.0	5062.0	C	69.1	53	.3	243	251	19.9	20.2	16.6	-15.9			2	1
5056.0	5064.0	D	69.2	50	.3	254	247	19.9	20.3	16.7	-15.9			2	1
5058.0	5066.0	D	64.0	345	.3	271	243	19.9	20.3		8.9		-16.0	1	2
5060.0	5068.0	C	47.6	334	.2	288	239	20.0	20.3	-10.3			-12.1	2	4
5062.0	5070.0	C	48.5	340	.2	302	234	20.0	20.4	14.1	6.0			1	4
5064.0	5072.0	C	34.3	335	.2	302	229	20.0	20.4	8.6	3.8			1	4
5066.0	5074.0	C	38.1	44	.3	303	223	20.0	20.4	8.4	15.7	.1		1	0
5068.0	5076.0	D	44.8	297	.3	310	217	20.1	20.5	8.[illegible]	-3.4			1	4

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	DIA NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
5070.0	5078.0	D	42.5	35	.4	316	211	20.2	20.6		1.2		-8.6	2	3
5072.0	5080.0	D	49.9	39	.4	325	205	20.3	20.8		5.9		-8.8	2	3
5074.0	5082.0	D	36.4	240	.4	327	199	20.5	21.0	-.5	-11.4			1	4
5076.0	5084.0	D	52.6	65	.5	335	194	20.8	21.3	-2.1	17.3			1	4
5078.0	5086.0	C	54.7	67	.5	339	190	21.0	21.7		16.2		20.9	1	2
5080.0	5088.0	B	36.6	306	.6	342	186	21.3	22.0		8.3		-3.0	1	2
5082.0	5090.0	B	27.1	255	.6	342	181	21.6	22.4	4.1			-7.0	1	3
5084.0	5092.0	B	27.5	215	.7	342	177	21.9	22.7	-.6			-8.0	1	3
5086.0	5094.0	B	35.0	200	.7	342	171	22.3	23.1	-2.8			-10.5	1	3
5088.0	5096.0	C	39.7	243	.7	341	166	22.8	23.5	7.5	-4.0			1	4
5090.0	5098.0	B	24.0	310	.7	339	163	23.6	23.6	7.4			1.8	1	3
5092.0	5100.0	C	38.3	333	.7	337	158	24.4	23.8		-1.7		-10.7	2	3
5094.0	5102.0	C	38.2	307	.7	334	154	25.1	23.8	13.3			4.8	1	3
5096.0	5104.0	C	35.2	243	.8	331	150	25.1	23.9	9.1			-7.7	1	3
5098.0	5106.0	B	13.7	350	.8	329	146	24.8	24.1	4.2			-1.7	2	4
5100.0	5108.0	A	39.1	291	.8	328	143	24.6	24.6	2.9	-10.7	-17.5		2	0
5106.0	5114.0	C	43.6	84	1.0	327	139	25.4	25.8	3.4			16.8	2	4
5108.0	5116.0	C	19.7	31	1.0	328	139	25.6	25.9	6.1			2.9	2	4
5110.0	5118.0	D	57.3	321	1.1	330	140	25.6	26.1	21.4			-20.2	2	4
5112.0	5120.0	D	58.2	52	1.1	330	141	25.6	26.1	-21.4			20.9	1	3
5114.0	5122.0	C	58.1	52	1.2	329	141	25.6	26.1		-.2		21.0	1	2
5116.0	5124.0	C	46.9	44	1.3	327	139	25.6	26.1		3.0		15.5	1	2
5118.0	5126.0	C	56.6	299	1.4	323	136	25.7	26.2		-11.4		-25.4	2	3
5120.0	5128.0	D	33.8	230	1.5	318	130	25.8	26.2	-6.9	-17.2			2	1
5124.0	5132.0	D	54.9	165	1.7	311	120	25.7	26.1	-24.8	-25.5			2	1
5126.0	5134.0	D	70.7	43	1.7	307	115	25.7	25.9		-21.0		24.5	1	2
5128.0	5136.0	D	57.1	282	1.7	303	112	25.6	25.7	24.3			17.1	1	3
5130.0	5138.0	C	46.8	187	1.8	299	108	25.4	25.6	10.9			-15.3	1	3
5132.0	5140.0	B	50.9	322	1.8	295	102	25.2	24.9	23.0			-2.7	2	4
5134.0	5142.0	B	23.8	288	1.9	289	96	24.3	24.3	7.0			-4.4	2	4
5136.0	5144.0	B	30.9	259	2.0	285	88	23.2	23.4	6.4			-8.4	2	4
5138.0	5146.0	C	64.5	277	2.0	282	81	22.4	22.5		14.1		-17.7	2	3
5140.0	5148.0	C	14.5	339	2.0	280	74	21.6	22.1	3.6	6.1			2	1
5142.0	5150.0	D	61.2	97	2.0	279	68	21.2	21.7		-17.6		6.8	2	3
5144.0	5152.0	C	32.5	332	2.0	277	61	20.9	21.4	7.4			6.9	2	4
5146.0	5154.0	C	47.7	75	2.0	276	55	20.6	21.2	-13.6			6.3	2	4
5148.0	5156.0	D	54.1	342	2.0	275	48	20.4	21.2	8.6			19.4	2	4
5150.0	5158.0	C	37.2	264	2.1	274	41	20.4	21.3		12.0		12.1	1	2
5160.0	5168.0	C	26.0	39	1.5	243	338	19.6	19.9	1.8			-6.2	1	3
5162.0	5170.0	D	28.1	25	1.4	237	327	19.5	20.0	1.4			-7.0	1	3
5164.0	5172.0	D	25.6	15	1.2	230	316	19.4	19.9	1.4			-6.2	1	3
5166.0	5174.0	C	28.4	360	1.1	221	305	19.3	19.8	1.2			-7.2	1	3
5168.0	5176.0	D	58.4	16	.9	214	295	19.3	19.5	12.6	-5.1			1	4
5170.0	5178.0	D	58.2	8	.7	208	288	19.2	19.5	12.5	-5.1			1	4
5176.0	5184.0	D	45.6	270	.5	207	270	19.4	19.5	-9.8	.4			2	1
5178.0	5186.0	C	50.4	252	.4	202	266	19.4	19.5	-8.5	5.9			2	1
5180.0	5188.0	C	45.6	276	.3	184	260	19.4	19.5		-5.4		6.8	2	3
5182.0	5190.0	D	45.6	354	.3	171	255	19.4	19.5	-8.2	-19.4			2	1
5184.0	5192.0	D	61.4	184	.3	117	251	19.5	19.5		-14.0		9.5	1	2
5188.0	5196.0	C	61.0	224	.2	355	241	19.5	19.5	-11.4	10.6			2	1
5190.0	5198.0	C	41.2	198	.2	355	237	19.5	19.6	-1.2	10.8			2	1
5192.0	5200.0	C	11.7	189	.2	355	231	19.5	19.6	-.1	2.7			2	1
5194.0	5202.0	B	56.1	38	.2	355	225	19.5	19.7	12.6	-3.8			2	1
5196.0	5204.0	B	56.3	34	.2	355	220	19.5	19.7	13.0	-3.2			2	1
5198.0	5206.0	C	49.6	17	.2	355	215	19.5	19.7	7.4			-14.6	2	4

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
5206.0	5214.0	D	66.6	265	.4	346	198	19.5	19.7	12.5	-17.2			1	4
5226.0	5234.0	C	64.9	169	.8	322	176	19.3	19.2	-17.5	4.8			2	1
5228.0	5236.0	D	71.0	156	.8	325	174	19.5	19.3	-17.6	16.4			2	1
5230.0	5238.0	C	64.7	280	.8	326	172	19.6	19.5		13.6		-13.2	1	2
5232.0	5240.0	C	64.4	277	.8	328	169	19.7	19.6		13.0		-13.3	1	2
5236.0	5244.0	C	53.3	101	.9	326	163	20.4	20.2	-17.9			5.7	1	3
5238.0	5246.0	C	45.5	57	.9	324	159	20.6	20.7		20.5		7.8	2	3
5248.0	5256.0	C	57.7	291	1.0	312	143	19.9	19.4	5.2	-17.2			2	1
5250.0	5258.0	C	61.2	64	1.1	312	142	19.7	19.3		-7.1		13.3	1	2
5252.0	5260.0	C	50.6	304	1.2	312	140	19.1	19.2	15.2			8.2	1	3
5254.0	5262.0	C	48.5	268	1.3	312	139	19.0	19.2	15.7			-1.4	1	3
5256.0	5264.0	B	56.0	257	1.3	311	137	19.0	19.2		14.7		-5.3	1	2
5258.0	5266.0	B	57.4	300	1.3	310	136	18.9	19.2	10.7	-8.4			2	1
5262.0	5270.0	C	68.7	292	1.4	308	133	18.8	19.1	14.9	-18.5			2	1
5264.0	5272.0	D	65.3	51	1.4	308	132	18.7	19.1		-6.0		17.3	1	2
5266.0	5274.0	D	65.5	63	1.4	307	131	18.7	19.1		-14.5		11.7	1	2
5268.0	5276.0	C	65.6	67	1.3	307	130	18.7	19.0		-18.2		9.0	1	2
5274.0	5282.0	D	58.3	36	1.1	304	124	18.5	18.8	14.9			15.5	2	4
5276.0	5284.0	C	54.8	10	1.2	304	122	18.5	18.8	-7.3			17.7	1	3
5278.0	5286.0	C	50.0	22	1.2	304	121	18.5	18.7	13.1			9.2	2	4
5280.0	5288.0	C	66.1	281	1.3	302	119	18.6	18.8	14.3	-13.5			2	1
5282.0	5290.0	B	64.5	278	1.3	300	117	18.6	18.8	12.8	-13.4			2	1
5284.0	5292.0	D	54.0	127	1.3	299	115	18.6	18.9		-5.1		9.4	2	3
5286.0	5294.0	B	23.1	223	1.2	300	113	18.7	19.1	5.4			-2.3	1	3
5288.0	5296.0	C	35.1	149	1.2	300	110	18.8	19.3	-.7			-9.0	1	3
5290.0	5298.0	D	57.0	283	1.2	300	107	18.9	19.5	14.2	-12.1			2	1
5292.0	5300.0	B	54.8	275	1.2	302	104	19.1	19.6	4.8	-2.5	-13.6		2	0
5294.0	5302.0	C	47.1	315	1.3	300	101	19.2	19.6	15.0	12.1			2	1
5298.0	5306.0	D	49.4	308	1.3	298	97	19.2	19.3	16.4	12.6			2	1
5310.0	5318.0	C	70.4	287	1.4	294	89	19.2	19.7		18.6		-18.3	2	3
5312.0	5320.0	C	55.4	277	1.3	296	88	19.5	19.9	12.2			17.0	1	3
5314.0	5322.0	C	50.4	61	1.3	299	88	19.6	20.2	-15.8			-4.5	1	3
5316.0	5324.0	D	54.1	6	1.4	300	89	19.8	20.3	-15.8			12.7	1	3
5322.0	5330.0	D	44.7	174	1.3	298	89	19.5	19.8	-10.2			-8.8	2	4
5324.0	5332.0	C	58.5	170	1.3	296	88	19.4	20.0	13.8	-3.8			1	4
5326.0	5334.0	C	59.4	170	1.3	297	87	19.3	20.5	14.9	-3.7			1	4
5328.0	5336.0	C	53.5	166	1.3	295	87	19.5	20.5		-4.3		-15.5	1	2
5330.0	5338.0	C	56.0	157	1.4	294	87	19.4	21.6		-9.0		-19.1	1	2
5332.0	5340.0	C	57.5	152	1.3	296	86	19.7	22.0	9.1	-12.1			1	4
5334.0	5342.0	C	63.9	146	1.3	295	86	20.2	22.0	9.1	-19.2			1	4
5336.0	5344.0	C	47.9	145	1.3	296	85	19.9	23.9	-16.2			-5.9	2	4
5338.0	5346.0	D	59.0	132	1.3	296	82	20.2	26.2	5.6	-20.6			1	4
5354.0	5362.0	D	51.3	243	1.1	276	65	26.2	25.7	16.4			-17.4	2	4
5356.0	5364.0	C	50.6	293	1.3	281	63	24.2	24.0	21.7			1.7	2	4
5358.0	5366.0	B	18.4	293	1.4	283	60	22.1	21.0	5.4			.6	2	4
5360.0	5368.0	B	10.4	264	1.3	285	56	20.2	19.2	2.8			-.8	2	4
5362.0	5370.0	B	11.9	31	1.5	282	53	19.4	19.6	-.7	2.0			2	1
5364.0	5372.0	D	44.5	33	1.4	280	51	19.2	19.4	-11.8	-17.6			1	4
5370.0	5378.0	C	68.3	300	1.6	279	48	19.0	19.2	-16.7	16.2			1	4
5372.0	5380.0	C	69.9	300	1.6	280	47	19.0	19.3	-18.9	16.9			1	4
5376.0	5384.0	D	46.0	191	1.5	277	45	19.0	19.3	13.7	16.8			1	4
5378.0	5386.0	C	46.9	348	1.3	274	43	19.0	19.3	2.9			14.4	2	4
5380.0	5388.0	C	49.6	327	1.0	263	40	19.1	19.3	-14.3			7.8	1	3
5382.0	5390.0	C	68.1	286	1.0	260	37	19.1	19.3	-14.1	18.6			1	4
5384.0	5392.0	D	31.2	274	.9	253	34	19.1	19.2		6.1		8.2	1	2

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
5386.0	5394.0	D	23.0	223	.9	249	31	19.1	19.2		8.2		5.0	1	2
5388.0	5396.0	D	22.1	183	.9	259	29	19.0	19.2		7.2		2.0	1	2
5390.0	5398.0	D	54.7	297	.9	264	27	18.9	19.1	14.0			13.7	2	4
5392.0	5400.0	C	45.0	294	.9	272	26	18.8	19.1	10.3			9.4	2	4
5394.0	5402.0	D	51.5	291	.9	279	24	18.7	19.1		1.6		13.2	1	2
5396.0	5404.0	C	54.6	291	.9	276	22	18.7	19.1		.9		14.4	1	2
5404.0	5412.0	C	46.2	307	.8	254	15	18.5	18.9		-7.7		6.1	1	2
5406.0	5414.0	C	58.3	276	.9	266	14	18.3	18.7	17.7			13.4	2	4
5408.0	5416.0	C	48.6	228	.9	263	13	18.3	18.5	15.0			-2.3	2	4

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
5196.0	5204.0	C	28.6	159	1.0	317	152	19.5	19.7		-10.1		-5.7	1	2
5198.0	5206.0	D	38.1	128	1.0	314	147	19.5	19.7		-14.0		-4.6	1	2
5202.0	5210.0	D	66.0	294	1.1	310	137	19.5	19.6	11.9	-18.5			2	1
5206.0	5214.0	C	64.5	288	1.2	307	129	19.5	19.7	12.1	-15.8			2	1
5208.0	5216.0	C	69.1	289	1.2	305	126	19.4	19.6	18.1	-15.6			2	1
5210.0	5218.0	D	68.1	54	1.3	303	123	19.3	19.5		-16.3		14.2	1	2
5212.0	5220.0	C	67.1	51	1.3	301	120	19.2	19.5		-15.4		13.5	1	2
5214.0	5222.0	B	63.4	46	1.4	299	117	19.1	19.3		-11.8		12.2	1	2
5216.0	5224.0	B	64.3	45	1.4	298	115	19.1	19.2		-12.6		12.3	1	2
5218.0	5226.0	C	62.8	45	1.4	298	113	19.1	19.1		-12.8		10.7	1	2
5220.0	5228.0	D	25.2	298	1.4	297	112	19.1	19.1		1.1		-4.2	2	3
5222.0	5230.0	C	3.7	37	1.4	297	110	19.1	19.1		1.2		.6	2	3
5224.0	5232.0	D	39.1	333	1.4	296	109	19.2	19.1	.4	11.8			1	4
5228.0	5236.0	C	61.0	296	1.4	295	106	19.4	19.3		6.3		-15.2	2	3
5230.0	5238.0	C	44.4	299	1.4	293	104	19.6	19.4	7.2			12.2	1	3
5232.0	5240.0	C	41.1	302	1.3	291	102	19.7	19.5	11.5	6.0			2	1
5234.0	5242.0	D	39.3	328	1.3	289	99	20.0	19.7	11.9	12.4			2	1
5236.0	5244.0	C	56.3	164	1.3	288	96	20.3	20.2	8.3	-10.8			1	4
5238.0	5246.0	D	35.3	173	1.3	286	92	20.5	20.6	-8.1			-6.1	2	4
5240.0	5248.0	C	64.6	150	1.3	284	89	20.4	20.7	4.5	-19.7			1	4
5248.0	5256.0	C	51.9	19	1.5	285	79	19.8	19.5	-16.9			4.9	1	3
5250.0	5258.0	C	45.4	146	1.5	284	78	19.7	19.3	-12.2			-5.4	2	4
5252.0	5260.0	C	51.8	130	1.5	282	76	19.3	19.2	-16.3			-2.8	2	4
5254.0	5262.0	C	21.1	334	1.5	283	74	19.0	19.2	4.7			2.9	2	4
5256.0	5264.0	C	46.3	318	1.5	280	72	19.0	19.2	-5.1			13.9	1	3
5258.0	5266.0	D	32.0	41	1.5	279	70	18.9	19.2		6.2		8.0	2	3
5260.0	5268.0	D	30.9	3	1.5	278	69	18.8	19.2	-7.5			3.3	1	3
5264.0	5272.0	C	41.3	82	1.6	280	66	18.7	19.1	-5.4	-15.0			1	4
5274.0	5282.0	D	54.1	267	1.4	271	59	18.5	18.9		15.0		-5.4	2	3
5276.0	5284.0	C	56.0	101	1.4	269	57	18.5	18.8	-.1			-18.6	1	3
5278.0	5286.0	C	26.7	345	1.4	269	56	18.5	18.8	-5.9	-2.7			1	4
5280.0	5288.0	C	64.1	332	1.5	271	54	18.5	18.8		-4.7		17.5	1	2
5286.0	5294.0	C	52.4	271	1.4	267	49	18.7	19.0		17.4		-.8	2	3
5288.0	5296.0	B	27.0	243	1.4	262	47	18.8	19.2	6.4			-3.3	2	4
5290.0	5298.0	C	17.0	282	1.4	258	44	18.9	19.5		3.5		4.4	1	2
5292.0	5300.0	C	56.5	339	1.3	255	42	19.1	19.6		-12.8		7.1	1	2
5294.0	5302.0	C	55.0	158	1.4	257	40	19.2	19.6		13.3		-5.5	1	2
5302.0	5310.0	C	66.9	286	1.3	258	33	19.0	19.4	-16.4	13.3			1	4
5310.0	5318.0	C	65.1	287	1.2	258	25	19.2	19.7	-18.9	6.3			1	4
5312.0	5320.0	C	49.0	281	1.2	262	24	19.4	19.9	14.3			8.8	2	4
5314.0	5322.0	C	43.6	279	1.3	263	25	19.6	20.2		5.3		12.3	1	2
5316.0	5324.0	C	12.5	7	1.2	263	24	19.8	20.3	-2.0	1.8	4.0		2	0
5318.0	5326.0	C	17.0	343	1.3	261	23	19.7	20.1		-4.4		.0	1	2
5320.0	5328.0	D	7.8	226	1.3	258	21	19.4	20.2	2.1			-.5	2	4
5330.0	5338.0	B	68.3	294	1.0	235	6	19.6	21.9		-15.2		19.3	1	2
5332.0	5340.0	B	67.3	296	1.0	238	6	20.2	22.8		-16.3		18.3	1	2
5334.0	5342.0	C	71.1	79	1.1	245	7	20.4	22.4	20.6	-17.3			1	4
5336.0	5344.0	C	69.0	297	1.1	248	8	20.1	24.0		-17.4		22.1	1	2
5338.0	5346.0	D	66.3	179	1.1	249	5	19.8	28.9	19.5	-6.7			2	1
5340.0	5348.0	C	65.4	291	1.0	238	1	22.7	31.7		-17.0		25.0	1	2
5342.0	5350.0	C	66.1	290	.9	224	357	24.9	31.8		-21.5		23.1	1	2
5344.0	5352.0	B	67.7	292	.8	212	354	23.6	32.3		-27.2		21.5	1	2
5350.0	5358.0	C	67.5	136	1.0	201	339	27.5	28.9	17.7	-27.3			2	1
5358.0	5366.0	B	62.7	281	.5	207	289	20.0	18.7	-16.4	5.8			2	1
5360.0	5368.0	B	54.7	268	.5	174	277	19.4	19.6		4.9		15.9	2	3

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
5362.0	5370.0	B	45.6	263	.3	175	269	19.4	19.6	-11.0			-8.6	1	3
5364.0	5372.0	B	52.2	264	.4	193	267	19.2	19.4	-13.1			-11.8	1	3
5368.0	5376.0	D	62.1	277	.2	153	263	19.0	19.2		-8.1		13.3	2	3
5370.0	5378.0	D	59.9	172	.1	102	261	19.0	19.3		-.3		16.6	1	2
5372.0	5380.0	D	58.7	183	.1	97	260	19.1	19.3		-7.0		12.0	1	2
5374.0	5382.0	C	49.4	168	.1	97	258	19.0	19.2		.0		11.2	1	2
5376.0	5384.0	C	71.7	275	.2	97	256	19.0	19.2		-18.6		17.6	2	3
5378.0	5386.0	D	49.6	219	.2	97	255	19.0	19.3	-2.4	13.3	18.0		2	0
5380.0	5388.0	D	52.0	217	.5	94	253	19.2	19.4	-17.1			-2.5	1	3
5382.0	5390.0	D	45.9	36	.7	83	249	19.2	19.3		-11.0		-14.0	2	3
5384.0	5392.0	C	51.2	216	.8	75	246	19.1	19.2		11.8		15.9	2	3
5386.0	5394.0	C	53.8	236	.7	68	245	19.1	19.1	-14.5			-10.6	1	3
5388.0	5396.0	C	40.6	158	.6	70	245	19.0	19.2	7.9			8.5	2	4
5390.0	5398.0	B	14.4	202	.5	74	245	18.8	19.2		-3.4		.0	1	2
5392.0	5400.0	B	20.2	200	.4	86	244	18.7	19.1		-4.8		.0	1	2
5394.0	5402.0	B	4.2	21	.4	120	243	18.6	19.1	1.0			.1	1	3
5396.0	5404.0	D	27.2	206	.5	105	241	18.8	19.2	-6.8			-1.0	1	3
5408.0	5416.0	C	23.0	228	.6	38	233	18.3	18.6	-3.4			4.1	2	4

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" REPEAT "

STATISTICAL SUMMARY OF DIP LOG CALCULATIONS
8.0 CORRELATION INTERVAL 2.0 STEP 80.0 MAXIMUM DIP ANGLE

DEPTH INTERVAL	AVERAGE DIP ANGLE	FRACTIONAL STANDARD DEVIATION	MEAN DIP AZIMUTH	VECTOR STRENGTH	NUMBER OF SAMPLES
5200 - 5250	52.0 DEG.	.34	346 (N 14 W)	.38	19
5250 - 5300	42.4 DEG.	.34	334 (N 26 W)	.24	16
5300 - 5350	53.5 DEG.	.42	292 (N 68 W)	.67	15
5350 - 5400	47.2 DEG.	.38	221 (S 41 W)	.56	20
5400 - 5450	23.0 DEG.	.00	228 (S 48 W)	1.00	1

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STATISTICAL SUMMARY OF DIP LOG CALCULATIONS
8.0 CORRELATION INTERVAL 2.0 STEP 80.0 MAXIMUM DIP ANGLE

DEPTH INTERVAL	AVERAGE DIP ANGLE	FRACTIONAL STANDARD DEVIATION	MEAN DIP AZIMUTH	VECTOR STRENGTH	NUMBER OF SAMPLES
4950 - 5000	39.5 DEG.	.31	15 (N 15 E)	.05	23
5000 - 5050	51.1 DEG.	.19	166 (S 14 E)	.13	22
5050 - 5100	43.0 DEG.	.32	331 (N 29 W)	.32	25
5100 - 5150	46.5 DEG.	.33	341 (N 19 W)	.33	22
5150 - 5200	43.7 DEG.	.33	338 (N 22 W)	.31	18
5200 - 5250	61.0 DEG.	.14	237 (S 57 W)	.22	8
5250 - 5300	54.0 DEG.	.22	319 (N 41 W)	.35	21
5300 - 5350	56.2 DEG.	.12	158 (S 22 E)	.51	13
5350 - 5400	43.1 DEG.	.43	288 (N 72 W)	.65	19
5400 - 5450	51.7 DEG.	.11	271 (N 89 W)	.85	3

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STATISTICAL SUMMARY OF DIP LOG CALCULATIONS
8.0 CORRELATION INTERVAL 2.0 STEP 80.0 MAXIMUM DIP ANGLE

DEPTH INTERVAL	AVERAGE DIP ANGLE	FRACTIONAL STANDARD DEVIATION	MEAN DIP AZIMUTH	VECTOR STRENGTH	NUMBER OF SAMPLES
2500 - 2550	36.6 DEG.	.30	292 (N 68 W)	.57	25
2550 - 2600	43.2 DEG.	.26	288 (N 72 W)	.91	25
2600 - 2650	44.3 DEG.	.23	297 (N 63 W)	.30	23
2650 - 2700	36.2 DEG.	.32	262 (S 82 W)	.42	25
2700 - 2750	42.7 DEG.	.29	270 (N 90 W)	.74	25
2750 - 2800	43.4 DEG.	.32	270 (N 90 W)	.79	25
2800 - 2850	43.3 DEG.	.30	282 (N 78 W)	.86	20
2850 - 2900	40.7 DEG.	.20	283 (N 77 W)	.64	25
2900 - 2950	47.8 DEG.	.27	316 (N 44 W)	.70	23
2950 - 3000	51.1 DEG.	.25	317 (N 43 W)	.59	23
3000 - 3050	38.8 DEG.	.42	277 (N 83 W)	.36	23
3050 - 3100	51.9 DEG.	.20	292 (N 68 W)	.89	23
3100 - 3150	49.9 DEG.	.29	260 (S 80 W)	.58	24
3150 - 3200	49.3 DEG.	.27	294 (N 66 W)	.88	25
3200 - 3250	52.4 DEG.	.27	272 (N 88 W)	.58	23
3250 - 3300	51.0 DEG.	.25	312 (N 48 W)	.52	22
3300 - 3350	51.3 DEG.	.23	21 (N 21 E)	.67	15
3350 - 3400	61.3 DEG.	.17	278 (N 82 W)	.67	9
3400 - 3450	39.0 DEG.	.40	345 (N 15 E)	.08	22
3450 - 3500	43.0 DEG.	.33	319 (N 41 W)	.23	24
3500 - 3550	39.9 DEG.	.46	283 (N 77 W)	.11	20
3550 - 3600	51.2 DEG.	.25	289 (N 71 W)	.25	25
3600 - 3650	48.7 DEG.	.18	302 (N 58 W)	.38	16
3650 - 3700	43.6 DEG.	.43	250 (S 70 W)	.38	22
3700 - 3750	43.7 DEG.	.35	209 (S 29 W)	.49	16
3750 - 3800	41.5 DEG.	.47	284 (N 76 W)	.36	17
3800 - 3850	38.1 DEG.	.46	42 (N 42 E)	.19	20
3850 - 3900	48.3 DEG.	.25	292 (N 68 W)	.27	23
3900 - 3950	47.9 DEG.	.20	242 (S 62 W)	.29	22
3950 - 4000	32.8 DEG.	.50	303 (N 57 W)	.13	23
4000 - 4050	45.3 DEG.	.41	115 (S 65 E)	.12	13
4050 - 4100	54.9 DEG.	.23	129 (S 51 E)	.66	16
4100 - 4150	40.5 DEG.	.39	113 (S 67 E)	.10	21
4150 - 4200	46.7 DEG.	.33	304 (N 56 W)	.30	20
4200 - 4250	36.8 DEG.	.45	332 (N 28 W)	.45	14
4250 - 4300	47.5 DEG.	.37	340 (N 20 W)	.32	13
4300 - 4350	51.6 DEG.	.26	268 (S 88 W)	.50	24
4350 - 4400	39.6 DEG.	.49	117 (S 63 E)	.24	18
4400 - 4450	49.1 DEG.	.24	59 (N 59 E)	.29	21
4450 - 4500	44.8 DEG.	.26	91 (S 89 E)	.30	18
4500 - 4550	50.6 DEG.	.28	106 (S 74 E)	.15	18
4550 - 4600	41.2 DEG.	.41	92 (S 88 E)	.17	22
4600 - 4650	39.8 DEG.	.39	265 (S 85 W)	.43	13
4650 - 4700	41.9 DEG.	.39	230 (S 50 W)	.15	20
4700 - 4750	52.3 DEG.	.16	330 (N 30 W)	.61	16
4750 - 4800	35.3 DEG.	.42	356 (N 4 W)	.43	20
4800 - 4850	42.6 DEG.	.52	286 (N 74 W)	.20	18
4850 - 4900	53.3 DEG.	.15	52 (N 52 E)	.08	22
4900 - 4950	55.3 DEG.	.28	138 (S 42 E)	.10	17

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AMOCO PRODUCTION COMPANY
ANSCHULTZ RANCH EAST W30-13
ANSCHUTZ RANCH
SUMMIT CO., UTAH
" MAIN "

STATISTICAL SUMMARY OF DIP LOG CALCULATIONS
8.0 CORRELATION INTERVAL 2.0 STEP 80.0 MAXIMUM DIP ANGLE

DEPTH INTERVAL	AVERAGE DIP ANGLE	FRACTIONAL STANDARD DEVIATION	MEAN DIP AZIMUTH	VECTOR STRENGTH	NUMBER OF SAMPLES
300 - 350	38.3 DEG.	.27	98 (S 82 E)	.88	20
350 - 400	35.7 DEG.	.28	103 (S 77 E)	.98	25
400 - 450	35.8 DEG.	.28	113 (S 67 E)	.87	25
450 - 500	40.8 DEG.	.26	97 (S 83 E)	.90	25
500 - 550	42.2 DEG.	.23	103 (S 77 E)	.72	25
550 - 600	39.3 DEG.	.42	125 (S 55 E)	.56	25
600 - 650	52.5 DEG.	.22	117 (S 63 E)	.33	25
650 - 700	40.4 DEG.	.18	86 (N 86 E)	.89	25
700 - 750	40.7 DEG.	.10	91 (S 89 E)	.92	25
750 - 800	40.5 DEG.	.23	91 (S 89 E)	.99	25
800 - 850	45.2 DEG.	.19	94 (S 86 E)	.89	25
850 - 900	45.1 DEG.	.13	94 (S 86 E)	.99	25
900 - 950	42.3 DEG.	.18	90 (S 90 E)	.91	25
950 - 1000	42.9 DEG.	.12	99 (S 81 E)	1.00	25
1000 - 1050	47.5 DEG.	.17	110 (S 70 E)	.98	25
1050 - 1100	49.6 DEG.	.15	96 (S 84 E)	.98	25
1100 - 1150	51.8 DEG.	.19	119 (S 61 E)	.45	25
1150 - 1200	49.8 DEG.	.31	68 (N 68 E)	.49	25
1200 - 1250	44.5 DEG.	.36	156 (S 24 E)	.15	24
1250 - 1300	47.4 DEG.	.28	311 (N 49 W)	.31	25
1300 - 1350	46.6 DEG.	.26	246 (S 66 W)	.41	24
1350 - 1400	41.3 DEG.	.35	206 (S 26 W)	.30	19
1400 - 1450	52.2 DEG.	.13	108 (S 72 E)	.96	25
1450 - 1500	60.8 DEG.	.10	104 (S 76 E)	.91	23
1500 - 1550	54.6 DEG.	.21	80 (N 80 E)	.76	25
1550 - 1600	38.2 DEG.	.36	109 (S 71 E)	.59	16
1600 - 1650	56.2 DEG.	.19	207 (S 27 W)	.11	14
1650 - 1700	47.7 DEG.	.32	166 (S 14 E)	.27	24
1700 - 1750	54.4 DEG.	.21	152 (S 28 E)	.33	15
1750 - 1800	33.1 DEG.	.36	148 (S 32 E)	.53	25
1800 - 1850	40.4 DEG.	.30	208 (S 28 W)	.91	25
1850 - 1900	39.3 DEG.	.26	194 (S 14 W)	.67	25
1900 - 1950	38.3 DEG.	.27	209 (S 29 W)	.88	25
1950 - 2000	33.2 DEG.	.53	204 (S 24 W)	.34	25
2000 - 2050	32.5 DEG.	.49	208 (S 28 W)	.30	20
2050 - 2100	53.6 DEG.	.20	276 (N 84 W)	.39	19
2100 - 2150	52.7 DEG.	.25	335 (N 25 W)	.10	25
2150 - 2200	53.3 DEG.	.27	302 (N 58 W)	.34	23
2200 - 2250	45.9 DEG.	.32	323 (N 37 W)	.27	23
2250 - 2300	44.2 DEG.	.29	269 (S 89 W)	.57	25
2300 - 2350	43.5 DEG.	.19	286 (N 74 W)	.73	25
2350 - 2400	45.6 DEG.	.30	275 (N 85 W)	.56	25
2400 - 2450	50.1 DEG.	.25	278 (N 82 W)	.69	24
2450 - 2500	41.5 DEG.	.24	286 (N 74 W)	.72	25

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL	CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
306.0	314.0 B	43.3	79	1.0	226	348	18.4	18.0	-7.4	-16.5	-.3		2	0
308.0	316.0 C	32.9	65	1.0	225	347	18.4	18.0	-6.6			-4.4	2	4
310.0	318.0 C	33.6	83	.9	235	358	18.4	17.8	-6.2	-11.4			2	1
312.0	320.0 C	31.5	87	.9	238	4	18.3	17.7	-5.8	-10.4			2	1
314.0	322.0 C	52.9	73	1.0	249	14	18.2	17.8	3.8	-11.9			1	4
316.0	324.0 C	44.2	88	1.0	259	24	18.1	17.9	3.9			-11.2	1	3
318.0	326.0 B	33.4	101	1.2	258	21	18.0	18.1		-1.9		-6.6	1	2
320.0	328.0 C	33.4	102	1.3	261	23	18.1	18.1		-1.9		-6.6	1	2
322.0	330.0 B	33.6	106	1.4	263	26	18.1	18.0		-1.9		-6.6	1	2
324.0	332.0 B	20.4	165	1.4	264	29	18.1	17.8	.5	-4.2			2	1
326.0	334.0 B	42.4	98	1.5	265	32	18.1	17.6	-10.1			-3.9	2	4
328.0	336.0 B	49.1	97	1.6	267	35	18.0	17.7	-13.1			-3.9	2	4
330.0	338.0 C	57.0	95	1.7	269	37	18.0	17.9	-17.9			-4.0	2	4
332.0	340.0 C	37.0	116	1.7	268	37	18.1	18.1	-6.8	-12.7	2.2		2	0
338.0	346.0 D	58.1	35	1.8	263	38	18.4	18.1		1.9		15.0	2	3
340.0	348.0 C	21.7	169	1.8	262	39	18.6	18.2	5.2			.0	1	3
342.0	350.0 A	30.4	117	1.8	260	41	18.8	18.4	-5.9	-10.0	2.1		2	0
344.0	352.0 A	33.3	110	1.8	259	43	19.0	18.8	-6.6	-10.8	4.2		2	0
346.0	354.0 B	37.9	103	1.8	258	45	18.9	18.9	-9.5	-11.9	7.2		2	0
348.0	356.0 C	40.0	96	1.7	257	47	18.8	19.0	-10.5			-.8	2	4
350.0	358.0 B	54.1	96	1.6	256	49	18.7	18.8	-17.3			-1.3	2	4
352.0	360.0 C	37.7	102	1.5	256	51	18.5	18.7	-9.6			-1.3	2	4
354.0	362.0 C	55.2	101	1.4	256	52	18.6	18.8	-18.1			-1.3	2	4
356.0	364.0 A	37.2	104	1.4	257	53	18.6	18.9	-9.3	-10.8	8.4		2	0
358.0	366.0 B	40.5	98	1.3	259	53	18.6	19.0	.2			-10.9	1	3
360.0	368.0 C	34.2	111	1.2	260	53	18.6	19.0	-8.4			-2.3	2	4
362.0	370.0 B	33.5	111	1.2	261	52	18.6	19.1	-2.4			-8.2	1	3
364.0	372.0 C	45.4	105	1.2	259	50	18.6	19.3	2.4	-9.7			1	4
366.0	374.0 B	43.5	106	1.2	259	51	18.6	19.2	2.5	-9.6			1	4
368.0	376.0 B	22.0	125	1.2	261	52	18.6	19.2	-4.5			-2.7	2	4
370.0	378.0 B	28.8	69	1.2	263	55	18.6	19.1	-3.5	-9.4			1	4
372.0	380.0 B	36.7	94	1.2	268	58	18.6	18.9	-9.2	-8.0	10.6		2	0
374.0	382.0 A	36.1	95	1.2	271	62	18.7	19.1	-1.1	-10.9	-7.3		1	0
376.0	384.0 A	36.5	101	1.2	275	67	19.0	19.6	-.9	-11.1	-7.9		1	0
378.0	386.0 A	37.2	107	1.2	280	73	19.0	19.6	-.7	-11.4	-8.1		1	0
380.0	388.0 B	41.8	114	1.2	283	78	19.1	19.6	-11.6			1.6	2	4
382.0	390.0 B	10.0	120	1.1	286	83	19.1	19.4	-.2			-2.1	1	3
384.0	392.0 B	22.4	99	1.1	287	86	18.8	18.8		-1.6		2.8	2	3
386.0	394.0 B	16.8	92	1.2	287	88	18.6	18.7	-2.5			-2.7	1	3
388.0	396.0 A	38.7	101	1.2	288	90	18.4	18.6	-8.1	-2.7	13.8		2	0
390.0	398.0 A	38.3	100	1.3	289	92	18.4	18.6	-7.8	-1.8	13.7		2	0
392.0	400.0 A	38.1	102	1.3	290	95	18.4	18.7	-5.6	-13.7	-1.8		1	0
394.0	402.0 B	38.4	106	1.3	293	98	18.4	18.7	-5.6	-13.8	-1.8		1	0
396.0	404.0 B	35.4	110	1.2	295	102	18.4	18.6	-5.4	-12.4	-1.6		1	0
398.0	406.0 B	36.8	114	1.2	298	105	18.3	18.4	-5.3			-7.6	1	3
400.0	408.0 B	38.4	120	1.2	302	106	18.2	18.3	-5.1			-8.4	1	3
402.0	410.0 A	30.3	110	1.2	304	106	18.2	18.2	-5.4	-10.2	-.6		1	0
404.0	412.0 A	34.8	109	1.2	305	106	18.3	18.3	-6.6	-12.2	-.4		1	0
406.0	414.0 A	35.4	108	1.2	305	106	18.3	18.4	-6.7	-12.4	-.4		1	0
408.0	416.0 B	35.7	108	1.2	302	106	18.4	18.5	-6.7	-12.7	-.5		1	0
410.0	418.0 C	36.5	105	1.2	299	105	18.5	18.5	-6.9	-13.1	.2		1	0
412.0	420.0 B	41.3	102	1.2	296	104	18.5	18.5	-6.7	.7	15.6		2	0
414.0	422.0 C	41.9	96	1.2	296	104	18.6	18.5	-6.8			9.0	2	4
416.0	424.0 B	30.6	103	1.2	295	104	18.6	18.5	-5.2	.2			2	1
418.0	426.0 B	30.4	104	1.2	298	104	18.7	18.7	-5.2	.1			2	1

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL	CORR. GRADE		DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
420.0	428.0	B	30.3	105	1.2	298	105	18.8	18.8	-5.2	.1			2	1
422.0	430.0	C	49.3	106	1.2	298	106	19.0	18.9	-10.6			-10.5	1	3
424.0	432.0	C	39.7	106	1.2	297	105	19.2	19.1	-7.7	-.1			2	1
426.0	434.0	B	43.3	98	1.2	295	104	19.3	19.0	-9.6			-7.8	1	3
428.0	436.0	C	44.5	93	1.2	295	103	19.6	19.0	-10.8			-7.4	1	3
430.0	438.0	C	44.8	215	1.2	294	102	19.7	19.1	12.7			-4.7	1	3
432.0	440.0	B	22.8	103	1.2	294	102	19.7	19.0	-3.8			-3.9	1	3
434.0	442.0	B	33.8	105	1.3	295	102	19.4	18.9	-6.5	-.7			2	1
436.0	444.0	A	11.1	115	1.3	295	101	19.2	18.8	-1.8	-.7	3.2		2	0
438.0	446.0	B	45.1	139	1.3	295	101	18.9	18.6	-1.4			-12.7	1	3
440.0	448.0	C	28.6	95	1.3	293	99	18.7	18.6	-5.3			-4.4	1	3
442.0	450.0	D	42.7	211	1.3	293	98	18.6	18.5	-4.3			-11.4	2	4
444.0	452.0	C	25.3	90	1.3	292	98	18.4	18.5	-3.5	1.2			2	1
446.0	454.0	C	20.4	170	1.2	293	98	18.3	18.4	-4.0	-6.4			2	1
448.0	456.0	C	56.9	94	1.2	295	98	18.1	18.2	-12.3			14.3	2	4
450.0	458.0	D	57.4	115	1.2	294	98	18.1	18.1	-16.8			9.0	2	4
452.0	460.0	B	28.2	107	1.3	292	97	18.1	18.1		-1.7		3.7	2	3
454.0	462.0	B	28.6	105	1.3	291	95	18.3	18.4	-3.9			-5.4	1	3
456.0	464.0	B	30.8	105	1.4	291	95	18.6	18.9	-4.2			-6.1	1	3
458.0	466.0	B	34.7	109	1.4	292	94	18.7	19.1	-4.4			-7.5	1	3
460.0	468.0	B	41.5	95	1.4	294	96	18.8	19.3	-8.1			-7.8	1	3
462.0	470.0	C	38.1	23	1.4	293	97	18.8	19.2		14.6		9.1	2	3
464.0	472.0	C	44.0	60	1.4	292	97	18.8	19.1	-1.3	11.2	13.8		2	0
466.0	474.0	B	43.5	64	1.4	292	97	18.8	19.2	-2.1	9.9	14.3		2	0
468.0	476.0	C	56.5	99	1.4	291	96	18.8	19.3	-14.2	-1.6			2	1
470.0	478.0	B	50.8	103	1.4	291	94	18.8	19.7	-12.5	-5.2			2	1
472.0	480.0	B	49.2	103	1.4	291	93	18.7	19.7	-12.0	-3.7			2	1
474.0	482.0	B	49.5	102	1.3	291	93	18.6	19.5	-12.0	-3.4			2	1
476.0	484.0	B	42.2	103	1.3	292	93	18.4	19.1		-2.7		6.5	2	3
478.0	486.0	B	25.6	111	1.4	293	93	18.2	18.5	-2.7			-5.1	1	3
480.0	488.0	B	53.9	109	1.4	294	93	17.9	18.2	-8.1			-14.4	1	3
482.0	490.0	C	61.3	101	1.4	294	93	17.9	18.1		-4.1		13.3	2	3
484.0	492.0	C	53.6	119	1.4	294	93	17.9	18.1	-5.1			-15.5	1	3
486.0	494.0	C	34.8	104	1.4	293	93	17.9	18.2		-2.3		4.7	2	3
488.0	496.0	C	36.1	102	1.4	294	93	17.9	18.2	-7.1	-1.9			2	1
490.0	498.0	C	26.5	105	1.5	295	93	17.9	18.2	-2.6	-8.2	-1.7		1	0
492.0	500.0	C	32.5	104	1.5	295	93	17.9	18.1	-6.3	-2.0			2	1
494.0	502.0	D	37.0	116	1.5	295	93	17.9	18.0	-8.4			3.3	2	4
496.0	504.0	D	28.0	5	1.5	294	93	17.9	17.9	-4.9			4.9	1	3
498.0	506.0	C	36.3	97	1.5	293	92	17.9	18.0		-1.0		5.7	2	3
500.0	508.0	A	34.2	112	1.5	293	92	18.0	18.2	-3.9	-10.9	-3.9		1	0
502.0	510.0	A	34.0	111	1.5	293	91	18.1	18.4	-6.8	-3.9	10.9		2	0
504.0	512.0	A	33.3	107	1.5	292	91	18.2	18.6	-6.9	-3.1	10.8		2	0
506.0	514.0	B	34.7	104	1.6	291	90	18.4	18.8	-4.6	-11.7	-3.0		1	0
508.0	516.0	A	39.2	97	1.6	291	89	18.5	19.0	-6.1	-14.2	-1.8		1	0
510.0	518.0	C	39.8	84	1.6	290	88	18.6	19.2		-14.7		-6.7	1	2
512.0	520.0	D	21.6	110	1.6	291	88	18.6	19.4	-4.5	-2.7			2	1
514.0	522.0	C	49.5	106	1.6	291	88	18.6	19.6	-13.1	-6.5			2	1
516.0	524.0	C	53.5	102	1.6	289	88	18.5	19.7	-14.4	-6.0			2	1
518.0	526.0	C	46.5	104	1.6	288	88	18.4	19.5	-11.6	-5.6			2	1
520.0	528.0	C	49.1	109	1.5	287	87	18.3	19.0	-5.5	-18.6			1	4
522.0	530.0	B	49.5	115	1.6	287	87	18.1	18.4	-4.0	-17.7			1	4
524.0	532.0	B	41.2	101	1.6	288	87	17.9	17.8		-3.5		5.4	2	3
526.0	534.0	B	38.7	101	1.6	290	87	17.7	17.5	-5.0			-8.0	1	3
528.0	536.0	B	39.7	124	[illegible].7	292	87	17.6	17.3	-.8	-11.0	-8.1		1	0

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL	CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
530.0	538.0	C 41.7	127	1.6	291	87	17.7	17.3	-10.4			.8	2	4
532.0	540.0	C 33.2	52	1.6	293	87	17.8	17.3	-7.8			-1.2	1	3
534.0	542.0	C 39.4	105	1.6	292	88	17.8	17.4	-4.7			-8.5	1	3
536.0	544.0	D 57.6	111	1.6	294	91	17.9	17.4	-7.9			-16.9	1	3
538.0	546.0	D 66.9	191	1.6	297	94	17.8	17.4		5.4		-17.2	1	2
540.0	548.0	D 44.9	303	1.6	298	98	17.7	17.6	12.3			-4.6	2	4
542.0	550.0	D 49.7	310	1.6	300	100	17.6	17.8	15.0			-4.0	2	4
544.0	552.0	C 50.0	333	1.5	300	101	17.5	17.9	14.5	17.5	-13.5		2	0
546.0	554.0	D 35.8	95	1.6	299	101	17.5	17.9	-5.2	1.5			2	1
548.0	556.0	D 30.4	110	1.6	299	102	17.5	17.8	-5.4			4.1	2	4
550.0	558.0	D 55.3	151	1.6	299	103	17.5	17.7	1.3	-15.8			1	4
552.0	560.0	C 24.5	62	1.6	299	104	17.5	17.7	-5.4			.0	1	3
554.0	562.0	C 26.0	79	1.6	299	106	17.6	17.7	-5.5			-1.6	1	3
556.0	564.0	C 30.7	96	1.7	299	108	17.8	17.8	-6.0			-3.7	1	3
558.0	566.0	C 31.3	101	1.6	299	111	17.9	17.8	-6.0			-4.1	1	3
560.0	568.0	C 46.5	97	1.7	300	113	17.8	17.7	-11.0			-6.0	1	3
562.0	570.0	C 49.7	131	1.7	301	115	17.7	17.6		-5.7		6.5	2	3
564.0	572.0	D 48.7	160	1.7	302	116	17.5	17.5	-12.8	-13.6	13.3		2	0
566.0	574.0	C 61.0	104	1.7	302	117	17.5	17.5	-11.1	6.6			2	1
568.0	576.0	D 54.2	100	1.7	303	118	17.5	17.5		7.1		14.4	2	3
570.0	578.0	D 37.0	113	1.7	304	118	17.5	17.5	-4.6	1.3	12.4		2	0
572.0	580.0	C 60.1	108	1.7	303	119	17.5	17.5	-11.0	5.8			2	1
574.0	582.0	C 54.4	90	1.7	304	120	17.5	17.6	-4.0	11.9			2	1
576.0	584.0	D 47.9	211	1.7	304	121	17.5	17.7	-9.3			-10.2	2	4
578.0	586.0	D 33.2	287	1.7	303	121	17.5	17.8	7.4			4.5	1	3
580.0	588.0	B 35.5	280	1.7	303	123	17.6	17.9	7.1	11.4	-4.5		1	0
582.0	590.0	C 3.8	118	1.7	303	124	17.6	17.9		-.6		-.3	1	2
584.0	592.0	C 8.2	187	1.7	304	127	17.6	17.9		-.7		-1.5	1	2
586.0	594.0	C 23.2	138	1.6	306	130	17.5	17.9	-2.9			-3.9	1	3
588.0	596.0	D 8.5	154	1.6	307	134	17.5	17.9		-2.0		-1.5	1	2
590.0	598.0	D 53.3	268	1.6	307	138	17.5	17.9		15.9		-1.6	1	2
592.0	600.0	C 51.9	273	1.6	308	141	17.5	18.0		15.9		-1.0	1	2
594.0	602.0	B 38.4	118	1.7	309	142	17.6	17.9	-3.3	5.6	11.9		2	0
596.0	604.0	B 49.3	114	1.7	311	143	17.6	17.8	-13.2			-3.7	1	3
598.0	606.0	A 52.9	104	1.6	312	144	17.6	17.6	-2.0	14.4	16.7		2	0
600.0	608.0	B 56.9	109	1.6	309	145	17.6	17.6	-2.8	15.0			2	1
602.0	610.0	B 43.2	98	1.6	309	146	17.5	17.6	-11.1			.7	1	3
604.0	612.0	C 53.1	100	1.6	309	147	17.5	17.5		-15.0		.7	1	2
606.0	614.0	D 47.0	175	1.6	310	147	17.5	17.5	-13.2	-8.8	15.8		2	0
608.0	616.0	D 62.1	306	1.6	309	148	17.4	17.4	9.6	-13.4			2	1
610.0	618.0	D 58.3	296	1.6	308	148	17.4	17.5	4.8	-15.9			2	1
612.0	620.0	C 54.3	191	1.6	307	148	17.4	17.4		-16.8		-16.7	1	2
614.0	622.0	D 52.9	190	1.6	306	147	17.4	17.5		-16.1		-15.9	1	2
616.0	624.0	D 71.0	134	1.7	307	147	17.4	17.6	-17.3	10.3			2	1
618.0	626.0	D 70.5	135	1.6	306	147	17.4	17.8	-17.1	9.8			2	1
620.0	628.0	D 71.1	135	1.6	306	148	17.4	17.9	-17.4	10.5			2	1
622.0	630.0	D 40.2	143	1.6	305	148	17.4	17.9		-13.9		-6.5	1	2
624.0	632.0	D 57.6	326	1.5	306	147	17.4	17.8	14.2	-.8			2	1
626.0	634.0	D 48.9	16	1.6	306	146	17.4	17.7	14.5	15.4			2	1
628.0	636.0	D 36.0	247	1.6	308	145	17.3	17.5	7.9			-4.8	1	3
630.0	638.0	D 46.7	302	1.6	308	144	17.2	17.4	12.6			5.1	1	3
632.0	640.0	D 64.6	166	1.6	308	143	17.0	17.4		-13.7		8.7	2	3
634.0	642.0	C 46.7	333	1.7	307	143	16.9	17.3	11.0	3.3			2	1
636.0	644.0	C 19.9	1	1.7	307	142	16.8	17.3	4.3	3.8	-5.3		2	0
638.0	646.0	C 50.2	104	1.7	306	142	16.9	17.3	-1.3			13.6	2	4

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL	CORR. GRADE		DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
640.0	648.0	A	45.9	92	1.7	306	142	17.1	17.4	1.8	13.4	10.6		2	0
642.0	650.0	B	54.4	101	1.8	306	142	17.6	17.7	-16.4			-1.1	1	3
644.0	652.0	B	53.7	102	1.8	305	142	18.0	18.1	-16.3			-1.2	1	3
646.0	654.0	B	53.1	102	1.8	304	142	18.3	18.5	-16.3			-1.2	1	3
648.0	656.0	C	53.4	102	1.8	303	142	18.2	18.7	-16.5			-1.3	1	3
650.0	658.0	C	27.9	354	1.7	302	140	18.0	18.8	7.0	5.5			2	1
652.0	660.0	C	38.4	79	1.7	302	139	17.8	18.8		-6.4		3.0	1	2
654.0	662.0	D	43.9	72	1.7	299	136	17.6	18.8	4.6			11.3	2	4
656.0	664.0	B	48.8	74	1.8	299	133	17.6	18.9	4.5	17.9	9.5		2	0
658.0	666.0	C	21.2	354	1.8	299	130	17.8	18.9	5.3	5.0			2	1
660.0	668.0	C	45.1	71	1.9	302	129	18.1	18.8		-8.9		3.3	1	2
662.0	670.0	C	49.1	93	1.9	302	128	18.1	18.6	-1.9			14.0	2	4
664.0	672.0	B	48.2	95	1.9	301	128	18.1	18.5	-2.4	11.0			2	1
666.0	674.0	B	34.9	83	1.8	300	128	17.9	18.6	-8.6			.4	1	3
668.0	676.0	B	46.8	81	1.7	298	129	17.9	18.8	-13.5	-12.1	14.2		1	0
670.0	678.0	B	42.1	87	1.7	299	130	18.1	18.9		-11.3		.0	1	2
672.0	680.0	B	32.6	88	1.8	301	131	18.3	19.0	-.8	8.0	7.9		2	0
674.0	682.0	A	32.2	87	1.8	300	131	18.5	19.1	-7.7	-7.7	8.0		1	0
676.0	684.0	B	35.0	90	1.7	300	130	18.6	19.1	-8.1	-9.3	8.4		1	0
678.0	686.0	B	36.4	83	1.7	299	128	18.7	19.4	-8.8	-9.0	9.9		1	0
680.0	688.0	B	45.1	91	1.7	299	126	18.7	19.5	-1.7	11.0			2	1
682.0	690.0	A	37.0	94	1.7	300	124	18.6	19.5	-1.3	7.0	11.5		2	0
684.0	692.0	B	39.8	98	1.8	300	122	18.6	19.6		-13.2		-3.4	1	2
686.0	694.0	B	39.3	89	1.7	300	120	18.6	19.5	-2.1			10.1	2	4
688.0	696.0	B	39.9	86	1.9	300	120	18.6	19.3	-1.5			10.4	2	4
690.0	698.0	B	34.0	102	1.9	300	121	18.7	19.1	-7.5			-3.5	1	3
692.0	700.0	B	47.5	108	1.9	300	122	18.5	18.8	-5.8	4.9	18.3		2	0
694.0	702.0	B	48.8	117	2.0	299	125	18.1	18.8	-8.2			10.8	2	4
696.0	704.0	A	46.7	116	2.0	297	126	17.7	18.6	-8.7	3.1	17.3		2	0
698.0	706.0	C	48.5	116	2.0	295	126	17.3	18.7	-10.8	-18.0			1	4
700.0	708.0	A	37.7	91	2.0	296	124	17.5	19.1	-1.6	7.7	10.5		2	0
702.0	710.0	A	36.9	89	1.9	296	120	18.1	19.6	-1.6	7.6	10.7		2	0
704.0	712.0	A	36.6	87	2.0	297	118	18.5	20.2	-1.6	7.6	10.9		2	0
706.0	714.0	B	36.1	86	1.9	299	117	18.9	20.3	-8.8	-11.0	7.5		1	0
708.0	716.0	C	38.3	120	2.0	300	117	19.0	20.2		-14.0		-7.3	1	2
710.0	718.0	B	32.1	92	2.0	301	117	19.0	20.1	-2.4	5.3			2	1
712.0	720.0	B	32.7	92	1.9	300	116	18.8	20.1	-2.5	5.2			2	1
714.0	722.0	A	44.4	88	2.0	301	116	18.6	20.0	-11.9	-14.9	9.2		1	0
716.0	724.0	B	45.1	88	1.9	300	116	18.5	19.9	-3.3	9.0			2	1
718.0	726.0	A	46.6	92	1.9	300	116	18.5	19.7	-3.4	8.2	16.8		2	0
720.0	728.0	A	44.4	92	2.0	299	116	18.7	19.7	-3.5	7.6	15.6		2	0
722.0	730.0	A	42.2	92	2.0	298	115	18.8	19.8	-3.9	7.0	14.5		2	0
724.0	732.0	A	42.5	91	2.0	299	115	18.8	19.8	-10.9	-14.6	7.4		1	0
726.0	734.0	A	42.8	91	2.0	301	115	18.8	19.8	-10.7	-14.8	7.5		1	0
728.0	736.0	B	44.1	91	2.0	301	115	18.8	19.9	-11.7			-3.9	1	3
730.0	738.0	B	40.0	90	2.0	302	115	18.9	20.2	-10.8	-13.5	6.9		1	0
732.0	740.0	B	40.2	90	2.0	302	113	19.0	20.6	-11.0	-13.8	6.7		1	0
734.0	742.0	C	44.3	91	2.0	301	111	19.2	20.8	-11.6			-4.7	1	3
736.0	744.0	C	43.1	86	2.0	302	110	19.2	20.9	-11.6			-3.7	1	3
738.0	746.0	C	39.9	89	1.9	300	110	19.3	20.8	-3.4	6.3	14.0		2	0
740.0	748.0	C	39.6	228	2.0	299	112	19.2	20.7	-3.9			-11.5	2	4
742.0	750.0	B	38.8	97	2.0	298	113	19.1	20.5	-4.1	4.4	13.8		2	0
744.0	752.0	B	46.1	85	2.1	296	113	19.0	20.2	-3.3			12.9	2	4
746.0	754.0	B	45.5	77	2.1	297	113	18.7	20.1	-1.2			13.1	2	4
748.0	756.0	B	38.0	68	[illegible].0	297	113	18.5	20.2	.7			10.2	2	4

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL	CORR. GRADE		DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
750.0	758.0	B	40.9	67	1.9	299	111	18.3	20.2	-11.3	-10.5			1	4
752.0	760.0	B	40.5	95	1.9	298	111	18.3	20.3	-4.7			9.4	2	4
754.0	762.0	B	35.2	96	1.9	298	110	18.4	20.3	-4.1	3.5			2	1
756.0	764.0	A	41.5	100	2.0	298	110	18.6	20.3	-9.6	-15.1	3.2		1	0
758.0	766.0	A	41.9	99	2.1	299	110	18.5	20.3	-5.8	3.4	15.2		2	0
760.0	768.0	A	41.3	94	2.1	300	109	18.4	20.4	-4.6	4.7	14.6		2	0
762.0	770.0	A	42.2	92	2.1	300	108	18.4	20.5	-9.9	-15.0	5.1		1	0
764.0	772.0	B	56.3	93	2.1	300	107	18.2	20.7	-8.8	7.1			2	1
766.0	774.0	B	57.3	93	2.1	300	106	18.1	20.9	-16.3			-9.3	1	3
768.0	776.0	B	59.2	94	2.1	299	105	18.2	20.9	-17.2			-10.5	1	3
770.0	778.0	B	30.7	73	2.1	299	106	18.4	20.9	-.9	6.7			2	1
772.0	780.0	B	14.1	93	2.1	298	106	18.6	21.0	-1.3	1.4			2	1
774.0	782.0	B	38.4	99	2.1	297	107	18.8	21.0		2.4		8.0	2	3
776.0	784.0	B	27.4	86	2.1	297	107	18.9	20.9	-2.2	3.9			2	1
778.0	786.0	B	29.3	91	2.1	298	108	18.6	20.9	-2.8	3.5			2	1
780.0	788.0	B	36.2	93	2.0	298	108	18.3	20.8	-8.1			-3.9	1	3
782.0	790.0	B	42.5	94	2.0	297	109	18.0	20.8	-10.0	-15.0	4.7		1	0
784.0	792.0	A	44.9	91	2.0	297	108	17.7	20.9	-4.6	6.1	15.7		2	0
786.0	794.0	A	43.9	91	2.0	296	108	17.7	20.9	-5.0	5.7	15.2		2	0
788.0	796.0	A	44.7	90	2.0	297	108	17.8	21.0	-11.3	-15.7	6.1		1	0
790.0	798.0	A	46.2	91	2.0	300	107	18.0	20.9	-5.0	6.0	16.9		2	0
792.0	800.0	B	44.2	90	2.0	301	106	18.3	20.8	-11.4	-15.9	5.7		1	0
794.0	802.0	A	38.2	94	2.1	300	105	18.2	20.7	-4.4	3.1	13.1		2	0
796.0	804.0	A	37.8	92	2.0	299	104	18.0	20.6	-4.4	3.3	12.8		2	0
798.0	806.0	A	38.9	93	2.0	297	103	17.8	20.6	-7.6	-13.2	3.1		1	0
800.0	808.0	A	42.1	95	2.1	296	103	17.6	20.7	-8.3	-14.9	2.6		1	0
802.0	810.0	B	40.5	94	2.1	295	102	18.2	20.9	-8.5			-5.8	1	3
804.0	812.0	A	45.8	100	2.1	296	103	18.6	21.0	-8.3	1.3	17.8		2	0
806.0	814.0	B	41.4	100	2.1	296	104	18.9	21.2	-8.3			-7.1	1	3
808.0	816.0	A	39.0	84	2.1	298	104	18.9	21.2	-3.7	6.0	13.4		2	0
810.0	818.0	A	38.9	84	2.1	300	105	18.9	21.1	-3.7	6.0	13.3		2	0
812.0	820.0	A	37.7	84	2.1	300	104	18.7	21.2	-3.8	5.7	12.7		2	0
814.0	822.0	A	38.4	87	2.0	300	104	18.7	21.2	-8.7	-13.2	5.0		1	0
816.0	824.0	B	42.4	106	2.1	299	103	18.5	21.3	-8.2			7.6	2	4
818.0	826.0	B	40.4	101	2.1	299	103	18.4	21.4	-6.9			7.7	2	4
820.0	828.0	B	34.7	100	2.1	299	102	18.5	21.3	-5.6	.6			2	1
822.0	830.0	C	40.9	92	2.1	299	102	18.6	21.1		-14.8		-5.8	1	2
824.0	832.0	B	43.2	78	2.1	300	102	18.7	20.8	-12.0	-15.1	7.8		1	0
826.0	834.0	C	49.1	82	2.1	300	101	18.7	20.6	-13.4			-5.6	1	3
828.0	836.0	B	48.8	82	2.1	300	101	18.7	20.5	-13.2			-5.7	1	3
830.0	838.0	C	63.6	103	2.1	298	101	18.6	20.4	-16.6			-17.9	1	3
832.0	840.0	B	62.7	97	2.1	297	102	18.5	20.4	-14.9			18.1	2	4
834.0	842.0	C	42.6	114	2.1	295	103	18.4	20.4	-9.5			5.9	2	4
836.0	844.0	C	48.7	126	2.1	294	104	18.3	20.4	-4.9	-18.0			1	4
838.0	846.0	C	64.5	305	2.2	295	104	18.3	20.4		16.8		-11.4	2	3
840.0	848.0	C	30.9	35	2.1	295	104	18.4	20.6	4.2	11.6			2	1
842.0	850.0	B	42.2	106	2.1	295	104	18.6	20.9	-7.5			-8.1	1	3
844.0	852.0	B	53.1	114	2.1	295	103	18.8	21.2		-5.1		8.8	2	3
846.0	854.0	B	46.0	103	2.1	295	102	18.9	21.5	-9.0			-9.3	1	3
848.0	856.0	B	53.3	109	2.1	295	102	18.9	21.7	-13.3			10.1	2	4
850.0	858.0	A	47.2	93	2.1	295	102	18.9	21.7	-11.1	-18.8	3.6		1	0
852.0	860.0	A	41.5	92	2.1	295	101	18.9	21.6	-9.0	-15.3	3.3		1	0
854.0	862.0	A	41.5	92	2.1	295	101	18.9	21.5	-8.9	-15.4	3.2		1	0
856.0	864.0	B	41.2	92	2.1	295	101	18.9	21.5	-8.6	-15.2	3.1		1	0
858.0	866.0	B	43.1	94	2.1	295	101	18.9	21.4	-8.5	-16.4	2.5		1	0

LOGTEX
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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL	CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
860.0	868.0	B 44.5	89	2.0	295	101	18.9	21.3	-5.9	4.5	16.9		2	0
862.0	870.0	A 44.6	86	2.0	294	102	18.8	21.1	-12.1	-16.6	5.7		1	0
864.0	872.0	B 42.4	82	2.0	293	102	18.2	20.9	-3.9	6.7			2	1
866.0	874.0	B 47.3	94	2.0	293	103	17.5	20.7		-17.5		-7.1	1	2
868.0	876.0	B 56.0	92	2.1	292	103	17.2	20.5	-14.6			-8.6	1	3
870.0	878.0	B 57.6	91	2.1	293	104	17.1	20.4	-15.7			-8.5	1	3
872.0	880.0	A 43.6	93	2.1	292	104	17.6	20.5	-5.2	3.7	15.3		2	0
874.0	882.0	A 41.7	92	2.1	293	103	18.3	20.6	-8.9	-14.9	3.7		1	0
876.0	884.0	B 40.5	91	2.1	294	103	18.6	20.6	-8.8	-14.5	3.7		1	0
878.0	886.0	B 41.1	91	2.2	296	102	18.8	20.7	-5.4	3.5	15.0		2	0
880.0	888.0	B 43.0	95	2.2	296	101	18.9	20.5		-16.3		-7.1	1	2
882.0	890.0	C 36.5	121	2.2	297	101	18.8	20.3		-12.1		-8.4	1	2
884.0	892.0	B 40.3	95	2.2	296	101	18.8	20.3	-7.2	2.0	14.7		2	0
886.0	894.0	B 41.8	96	2.2	296	101	18.8	20.3	-6.2	1.6	15.5		2	0
888.0	896.0	A 41.5	98	2.2	296	101	18.4	20.3	-6.9	1.1	15.0		2	0
890.0	898.0	A 43.2	97	2.3	295	101	17.9	20.3	-7.8	-15.5	1.3		1	0
892.0	900.0	B 52.6	98	2.3	294	100	17.4	20.2	-9.8	1.3			2	1
894.0	902.0	B 60.7	97	2.3	293	100	17.2	20.2	-15.1			-12.8	1	3
896.0	904.0	B 48.6	94	2.3	292	101	17.2	20.3	-6.7	2.8	17.9		2	0
898.0	906.0	A 44.9	91	2.2	291	101	17.4	20.2	-6.5	3.3	15.8		2	0
900.0	908.0	B 37.1	88	2.2	291	101	17.8	20.1	-4.3	3.5			2	1
902.0	910.0	A 42.4	90	2.2	292	100	18.1	19.9	-9.6	-15.1	3.3		1	0
904.0	912.0	B 42.3	88	2.2	292	100	18.5	19.7	-9.4			-5.9	1	3
906.0	914.0	B 35.8	97	2.3	292	100	18.6	19.6		-12.3		-5.8	1	2
908.0	916.0	B 35.3	98	2.3	291	101	18.0	19.6		.8		6.3	2	3
910.0	918.0	A 41.1	99	2.3	290	101	17.5	19.8	-7.2	-13.9	.7		1	0
912.0	920.0	A 43.0	99	2.4	289	101	16.8	20.1	-7.3	-14.5	.7		1	0
914.0	922.0	B 37.7	95	2.4	288	100	17.0	20.3	-5.4	1.3			2	1
916.0	924.0	B 64.5	72	2.3	289	98	17.7	20.5	-6.1	17.9			2	1
918.0	926.0	B 62.0	71	2.3	289	98	18.3	20.6	-5.6	16.9			2	1
920.0	928.0	C 51.8	281	2.3	289	98	18.8	20.6		1.9		-12.0	2	3
922.0	930.0	B 32.4	91	2.3	289	98	18.9	20.4	-4.6	1.7			2	1
924.0	932.0	C 36.1	91	2.3	289	98	18.8	20.2	-5.3	1.9			2	1
926.0	934.0	B 40.1	86	2.3	288	99	18.7	20.0	-5.2	3.7	14.2		2	0
928.0	936.0	B 36.6	82	2.3	288	99	18.6	19.9	-4.8	4.4	12.1		2	0
930.0	938.0	A 37.2	91	2.3	287	99	18.4	19.9	-5.7	2.2	12.7		2	0
932.0	940.0	A 44.3	89	2.3	287	100	18.3	19.8	-6.1	3.4	16.3		2	0
934.0	942.0	A 44.5	92	2.2	288	100	18.1	19.7	-6.5	2.7	16.4		2	0
936.0	944.0	A 41.6	93	2.2	289	99	17.9	19.5	-5.5	1.9	14.6		2	0
938.0	946.0	A 40.7	92	2.3	289	98	17.9	19.5	-8.5	-14.1	1.9		1	0
940.0	948.0	A 38.5	92	2.3	289	97	18.0	19.6	-7.9	-13.1	1.6		1	0
942.0	950.0	A 38.2	90	2.3	287	96	18.3	19.6	-7.8	-13.1	1.6		1	0
944.0	952.0	A 39.0	94	2.4	286	95	18.5	19.6	-7.9	-13.8	.7		1	0
946.0	954.0	B 43.5	94	2.4	286	96	18.6	19.6	-7.1	.8	16.2		2	0
948.0	956.0	C 51.2	100	2.4	285	95	18.6	19.5	-9.6			-11.5	1	3
950.0	958.0	B 39.6	97	2.4	285	95	18.6	19.5	-7.3	-.6			2	1
952.0	960.0	B 42.2	97	2.4	284	94	18.6	19.5	-7.7	-.6	15.5		2	0
954.0	962.0	B 44.0	96	2.4	284	94	18.7	19.4	-7.9	-.7	16.5		2	0
956.0	964.0	A 43.2	96	2.4	284	94	18.6	19.2	-8.4	-.5	16.0		2	0
958.0	966.0	B 52.2	96	2.5	283	94	18.6	19.1		-.8		10.6	2	3
960.0	968.0	B 34.3	97	2.5	284	94	18.6	19.2	-6.0	-.4			2	1
962.0	970.0	B 42.6	104	2.4	282	94	18.5	19.4		-15.3		-9.2	1	2
964.0	972.0	B 44.5	94	2.4	283	93	18.7	19.6		-16.9		-8.4	1	2
966.0	974.0	B 45.4	90	2.4	283	94	18.6	19.5	-7.1	1.5	17.4		2	0
968.0	976.0	B 45.7	93	[illegible].4	282	94	18.6	19.3	-8.1	.6	17.5		2	0

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ANOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
970.0	978.0	A	42.2	92	2.5	282	95	18.6	19.1	-7.4	1.1	15.5		2	0
972.0	980.0	A	41.7	97	2.5	280	95	18.4	19.2	-6.8	-15.0	-.6		1	0
974.0	982.0	B	29.3	104	2.5	280	93	18.4	19.4	-5.5	-1.8			2	1
976.0	984.0	B	30.2	108	2.5	278	92	18.5	19.4	-6.1	-3.0			2	1
978.0	986.0	B	47.3	103	2.6	278	91	18.6	19.4	-6.8			-11.1	1	3
980.0	988.0	B	40.6	100	2.6	278	90	18.7	19.3	-8.4	-2.5			2	1
982.0	990.0	C	45.6	105	2.6	279	91	18.6	19.1	-6.3	-16.9			1	4
984.0	992.0	C	46.6	94	2.6	280	92	18.5	19.1	-8.6	-17.9			1	4
986.0	994.0	B	45.3	104	2.6	280	91	18.5	19.1	-10.3	-3.8			2	1
988.0	996.0	B	47.9	96	2.6	280	91	18.4	19.1	-8.6	-18.5			1	4
990.0	998.0	B	47.4	102	2.7	280	91	18.5	19.0		-3.7		7.1	2	3
992.0	1000.0	B	38.7	100	2.7	282	89	18.4	19.0	-5.2			-7.9	1	3
994.0	1002.0	B	45.0	99	2.7	281	88	18.4	19.0		-3.3		6.5	2	3
996.0	1004.0	B	44.3	99	2.9	278	88	18.3	18.9		-3.3		6.3	2	3
998.0	1006.0	B	47.0	100	2.9	279	88	18.2	18.8		-4.1		6.6	2	3
1000.0	1008.0	B	43.8	99	2.9	278	88	18.2	18.8	-6.1	-15.5			1	4
1002.0	1010.0	B	29.5	92	2.9	277	86	18.3	18.8		-.8		4.2	2	3
1004.0	1012.0	B	40.0	105	2.8	280	85	18.5	18.8	-9.1			4.1	2	4
1006.0	1014.0	B	40.1	104	2.8	281	84	18.5	18.8	-9.2			4.0	2	4
1008.0	1016.0	B	40.6	108	2.8	280	84	18.5	18.8	-9.5			3.6	2	4
1010.0	1018.0	B	27.7	103	2.8	281	85	18.2	19.0	-5.4	-2.6			2	1
1012.0	1020.0	B	56.9	120	2.7	280	86	18.0	19.2	-17.9			2.7	2	4
1014.0	1022.0	B	57.5	120	2.7	280	87	17.8	19.4	-18.2			2.8	2	4
1016.0	1024.0	B	57.5	119	2.7	281	87	17.7	19.5	-18.1			3.1	2	4
1018.0	1026.0	B	47.6	114	2.8	282	86	17.7	19.5		-9.4		3.0	2	3
1020.0	1028.0	B	44.4	101	2.8	281	85	17.9	19.6		-4.8		5.2	2	3
1022.0	1030.0	C	56.2	108	2.8	281	84	18.0	19.7	-5.7			-16.5	1	3
1024.0	1032.0	B	46.2	116	2.8	280	82	18.2	19.8	-12.4			1.7	2	4
1026.0	1034.0	B	46.9	129	2.8	280	80	18.4	19.8	-13.3			-1.7	2	4
1028.0	1036.0	B	44.7	129	2.8	280	79	18.6	19.7	-12.2			-1.8	2	4
1030.0	1038.0	A	50.3	127	2.8	279	76	18.8	19.6	1.7	-12.9	-17.0		1	0
1032.0	1040.0	A	53.3	118	2.7	278	75	18.9	19.6	.6	-16.8	-16.4		1	0
1034.0	1042.0	A	52.4	116	2.7	279	74	18.8	19.8	-.2	-16.4	-16.0		1	0
1036.0	1044.0	C	55.0	114	2.7	278	73	18.9	20.4	-.6			-18.0	1	3
1038.0	1046.0	C	54.4	109	2.7	280	74	18.9	20.9	-2.1			-17.4	1	3
1040.0	1048.0	C	54.1	110	2.8	280	75	18.9	21.0	-2.0			-17.3	1	3
1042.0	1050.0	C	53.0	101	2.8	279	75	19.0	21.1		-11.2		4.7	2	3
1044.0	1052.0	B	39.9	98	2.8	279	76	19.0	21.0	-3.7			-9.6	1	3
1046.0	1054.0	C	46.0	98	2.7	278	75	19.0	21.0	-4.4			-12.1	1	3
1048.0	1056.0	C	50.0	87	2.7	278	76	19.0	21.1	-12.3	-4.4			2	1
1050.0	1058.0	C	48.6	98	2.7	279	76	19.1	21.2	-13.1	-8.0			2	1
1052.0	1060.0	C	50.1	92	2.7	280	77	19.1	21.3	-13.1			7.0	2	4
1054.0	1062.0	A	48.8	88	2.7	281	77	19.1	21.3	-11.0	-3.9	19.5		2	0
1056.0	1064.0	B	50.4	98	2.7	283	76	19.1	21.5	-5.5	-19.5			1	4
1058.0	1066.0	B	48.3	96	2.7	282	75	19.2	21.7	-13.0			5.2	2	4
1060.0	1068.0	B	48.3	94	2.8	282	74	19.2	21.8	-13.0			5.5	2	4
1062.0	1070.0	A	30.6	122	2.8	281	72	19.3	22.0	-7.7	-9.2	6.3		2	0
1064.0	1072.0	A	54.9	109	2.8	281	71	19.3	22.2	-18.6	-17.6	19.4		2	0
1066.0	1074.0	A	54.5	109	2.8	282	71	19.3	22.4	-18.5	-17.7	19.0		2	0
1068.0	1076.0	B	56.3	113	2.8	282	70	19.3	22.6	.9	-19.0			1	4
1070.0	1078.0	A	54.3	107	2.8	282	69	19.3	22.7	-.6	-19.2	-17.4		1	0
1072.0	1080.0	C	56.2	107	2.8	281	69	19.4	22.5	-.8			-19.6	1	3
1074.0	1082.0	C	56.8	105	2.8	281	68	19.3	22.4	-1.4			-19.9	1	3
1076.0	1084.0	D	36.5	99	2.8	281	68	19.3	22.3	-1.6			-9.4	1	3
1078.0	1086.0	C	34.7	98	2.8	281	68	19.2	22.3	-1.7			-8.6	1	3

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
1080.0	1088.0	C	61.1	82	2.8	282	69	19.3	22.3		-8.0		11.3	2	3
1082.0	1090.0	C	53.1	69	2.8	283	69	19.3	22.3	-12.3			-11.3	1	3
1084.0	1092.0	B	56.1	94	2.9	283	70	19.4	22.3	-17.9	-12.2			2	1
1086.0	1094.0	C	55.5	93	2.9	284	69	19.5	22.5		-11.8		5.8	2	3
1088.0	1096.0	C	50.9	74	2.9	284	68	19.5	22.9	-10.1			-11.9	1	3
1090.0	1098.0	C	46.6	93	2.9	284	68	19.5	23.1		-9.4		3.7	2	3
1092.0	1100.0	B	48.7	90	2.9	285	68	19.4	23.3	-4.2	-18.6	-9.1		1	0
1094.0	1102.0	B	46.9	92	2.9	285	67	19.4	23.2		-9.0		4.2	2	3
1096.0	1104.0	B	46.8	92	2.9	284	67	19.4	23.0		-9.3		3.8	2	3
1098.0	1106.0	A	44.3	94	2.8	283	66	19.4	23.1	-3.7	-15.2	-9.4		1	0
1100.0	1108.0	C	49.9	96	2.8	280	65	19.4	23.2		-17.9		-15.3	1	2
1102.0	1110.0	C	50.6	98	2.8	281	65	19.3	23.2		-17.9		-15.9	1	2
1104.0	1112.0	D	50.7	101	2.8	282	65	19.3	23.2	-16.1			1.1	2	4
1106.0	1114.0	D	53.8	106	2.8	281	67	19.3	22.9	-18.2			.1	2	4
1108.0	1116.0	B	56.1	107	2.8	282	69	19.3	22.9		-20.3		-19.7	1	2
1110.0	1118.0	B	55.9	116	2.8	283	72	19.5	22.8	1.5			-19.9	1	3
1112.0	1120.0	B	55.8	120	2.8	284	77	19.5	22.8	1.1			-19.9	1	3
1114.0	1122.0	D	38.6	303	2.8	287	82	19.5	22.9		12.8		-.2	2	3
1116.0	1124.0	C	32.5	158	2.8	290	87	19.5	23.0	4.9			-8.1	1	3
1118.0	1126.0	D	51.1	227	2.9	292	92	19.5	23.0		18.5		-.8	1	2
1120.0	1128.0	D	60.0	87	2.9	291	93	19.5	23.0	-12.9			17.4	2	4
1122.0	1130.0	C	46.0	249	2.8	290	93	19.5	23.5		20.3		5.3	1	2
1124.0	1132.0	D	60.8	86	2.9	289	91	19.5	23.9	-13.7			17.5	2	4
1126.0	1134.0	C	48.5	23	2.9	287	88	19.4	24.3	-16.7			8.4	1	3
1128.0	1136.0	D	72.2	72	2.8	289	85	19.3	24.5	-18.2	15.0			2	1
1130.0	1138.0	C	52.7	128	2.9	290	84	19.2	24.4	-18.3			-1.9	2	4
1132.0	1140.0	C	71.1	155	2.9	291	85	19.2	24.2	21.2	-16.8			1	4
1134.0	1142.0	D	60.0	179	2.9	291	86	19.2	24.1	-18.8			-21.1	2	4
1136.0	1144.0	D	54.5	207	2.9	289	87	19.3	24.0	-7.2			-21.6	2	4
1138.0	1146.0	D	44.0	106	2.9	288	86	19.4	22.5	-11.3			4.7	2	4
1140.0	1148.0	D	34.9	205	2.8	286	85	19.5	21.5	-2.5			-10.2	2	4
1142.0	1150.0	D	39.2	202	2.8	286	84	19.5	20.2	-2.8			-11.3	2	4
1144.0	1152.0	C	56.6	49	2.8	286	84	19.5	19.2	-3.1	16.3			2	1
1146.0	1154.0	C	59.0	51	2.9	286	84	19.4	19.4	-3.8	17.4			2	1
1148.0	1156.0	C	43.6	328	3.0	287	86	19.4	19.8		17.8		4.0	2	3
1150.0	1158.0	D	47.1	33	3.0	287	88	19.4	20.1		17.7		14.4	2	3
1152.0	1160.0	D	71.4	21	3.0	288	90	19.4	20.5		-19.2		18.8	1	2
1154.0	1162.0	D	70.7	22	2.9	289	91	19.5	20.8		-19.2		18.0	1	2
1156.0	1164.0	C	69.8	158	2.8	292	92	19.6	21.1	14.5	-18.8			1	4
1158.0	1166.0	D	60.1	278	2.7	291	93	19.6	21.2		3.9		-17.0	2	3
1160.0	1168.0	D	58.8	181	2.8	292	92	19.6	21.2	-16.7			-17.1	2	4
1162.0	1170.0	D	53.5	160	2.8	292	92	19.5	21.5	-17.0			-8.6	2	4
1164.0	1172.0	C	55.9	120	2.8	289	90	19.2	21.9	-18.4	-14.6			2	1
1166.0	1174.0	C	55.8	117	2.8	288	88	19.2	22.1	-18.3	-14.5			2	1
1168.0	1176.0	D	58.7	105	2.8	286	87	19.3	22.2	-18.7			8.2	2	4
1170.0	1178.0	D	58.7	104	2.8	285	86	19.4	22.2	-18.7			8.5	2	4
1172.0	1180.0	C	51.1	57	2.8	286	86	19.4	21.8	-16.2			-3.2	1	3
1174.0	1182.0	D	56.3	59	2.9	287	86	19.1	21.7	-19.0			-4.5	1	3
1176.0	1184.0	D	52.4	123	2.9	287	85	19.0	21.8	-.5			-16.8	1	3
1178.0	1186.0	D	30.3	60	2.9	286	84	18.8	21.7	-1.8	5.4			2	1
1180.0	1188.0	D	46.9	131	2.9	286	84	18.8	21.7	-14.0			-1.8	2	4
1182.0	1190.0	D	53.8	98	2.9	284	83	19.0	21.6	-14.7			8.0	2	4
1184.0	1192.0	D	22.1	41	2.9	284	82	19.2	21.5		6.1		5.5	2	3
1186.0	1194.0	D	38.0	349	3.0	285	81	19.1	21.5	-8.0			9.5	1	3
1188.0	1196.0	C	40.2	351	3.0	284	81	19.0	21.4	-8.9			10.0	1	3

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
1190.0	1198.0	D	17.6	67	3.0	284	83	18.7	21.4	-3.5	-4.7			1	4
1192.0	1200.0	D	19.1	84	2.9	285	83	18.4	21.4	-2.9	-5.4			1	4
1194.0	1202.0	D	41.8	322	2.9	283	83	18.3	21.3	13.4			4.0	2	4
1196.0	1204.0	D	67.6	12	2.9	284	81	18.4	21.2		-15.0		16.8	1	2
1198.0	1206.0	D	46.5	348	2.9	285	79	18.6	21.1	12.2			11.1	2	4
1200.0	1208.0	C	67.3	10	2.9	285	79	18.8	21.0		-15.5		16.2	1	2
1202.0	1210.0	C	70.4	190	2.9	286	79	18.9	21.1		19.5		-17.3	1	2
1204.0	1212.0	C	48.6	296	2.9	284	80	19.2	21.1		19.5		17.5	1	2
1206.0	1214.0	D	44.7	282	2.9	282	80	19.3	21.2	5.4	19.6			1	4
1208.0	1216.0	D	43.8	278	2.8	281	79	19.4	21.2	6.1	19.4			1	4
1210.0	1218.0	C	51.2	140	2.8	281	78	19.5	21.2	5.9			-16.0	1	3
1212.0	1220.0	C	50.6	158	2.9	282	77	19.5	21.2		-2.8		-13.5	1	2
1214.0	1222.0	C	49.7	155	3.0	284	77	19.4	21.1		-3.5		-13.3	1	2
1216.0	1224.0	C	13.8	66	3.0	285	76	19.3	21.1		-3.7		-1.1	1	2
1218.0	1226.0	C	16.3	16	3.1	282	76	19.2	21.1	2.0			3.9	2	4
1220.0	1228.0	C	36.1	25	3.1	282	75	19.2	21.1	2.1	12.2			2	1
1222.0	1230.0	B	27.2	288	3.1	280	76	19.3	21.1	8.6	6.4	-9.7		2	0
1224.0	1232.0	C	20.9	90	3.0	279	76	19.3	21.1	-3.8			2.2	2	4
1226.0	1234.0	C	36.9	176	3.0	279	76	19.0	21.0	-5.9			-9.2	2	4
1228.0	1236.0	D	53.4	19	3.1	278	77	18.7	21.1	-18.3	-12.5			1	4
1230.0	1238.0	D	57.0	171	3.0	278	78	18.4	21.0	16.8			-14.5	1	3
1232.0	1240.0	D	61.2	265	3.0	278	80	18.4	21.0		4.2		-16.8	2	3
1234.0	1242.0	D	60.2	172	3.1	279	83	18.9	20.9	17.9			-17.4	1	3
1236.0	1244.0	C	60.2	173	3.0	277	84	19.5	20.5	17.6			-17.1	1	3
1238.0	1246.0	D	34.7	142	3.0	279	85	20.0	20.2	-8.8	-11.2	6.4		2	0
1240.0	1248.0	D	65.7	184	3.1	279	86	20.2	19.7		6.6		-18.0	1	2
1244.0	1252.0	C	52.8	274	3.0	285	93	20.0	18.8	15.0				2	1
1246.0	1254.0	C	21.4	63	3.0	285	97	19.9	18.4	-.6	7.1			2	1
1248.0	1256.0	C	24.1	64	2.9	286	100	19.8	18.1	-.6	4.9			2	1
1250.0	1258.0	C	48.8	295	2.9	287	102	19.8	17.9	14.6	4.6			2	1
1252.0	1260.0	D	54.2	201	3.0	286	104	19.8	17.8	14.7	4.6			1	4
1254.0	1262.0	C	52.9	203	3.1	285	105	19.7	17.9	14.1	4.6			1	4
1256.0	1264.0	C	58.9	300	3.0	283	106	19.7	18.0		8.0		-13.9	2	3
1258.0	1266.0	C	58.3	303	2.9	280	108	19.6	18.0		8.2		-13.0	2	3
1260.0	1268.0	D	48.9	202	2.7	279	111	19.5	18.0	11.2			-9.9	1	3
1262.0	1270.0	D	49.7	204	2.5	279	113	19.5	18.0	11.5			-10.1	1	3
1264.0	1272.0	D	39.5	266	2.7	281	115	19.5	18.0	3.9			-11.6	2	4
1266.0	1274.0	D	17.9	319	2.6	281	116	19.8	18.0	4.4	2.1			2	1
1268.0	1276.0	D	18.4	315	2.6	282	117	19.9	18.0	4.5	1.7			2	1
1270.0	1278.0	C	18.8	316	2.6	282	117	19.9	18.1	4.6			-2.8	2	4
1272.0	1280.0	D	56.5	332	2.6	281	116	19.8	18.2		16.9		-4.6	2	3
1274.0	1282.0	D	25.6	306	2.6	280	115	19.5	18.4		1.5		-4.4	2	3
1276.0	1284.0	C	49.7	112	2.6	278	114	19.2	18.3	-10.2			10.6	2	4
1278.0	1286.0	C	43.2	178	2.5	279	115	18.9	17.8	4.0	-7.1			1	4
1280.0	1288.0	C	46.9	157	2.6	280	116	18.9	17.6	-13.1	-12.1			2	1
1282.0	1290.0	D	48.2	341	2.6	281	118	18.9	17.6		16.6		15.2	1	2
1284.0	1292.0	D	50.1	352	2.7	282	120	18.9	17.7		14.9		15.9	1	2
1286.0	1294.0	C	62.9	7	2.7	283	121	18.9	17.8	-7.7	16.4			1	4
1288.0	1296.0	C	59.9	21	2.6	283	122	19.2	17.7	-11.2	7.0			1	4
1290.0	1298.0	B	52.0	32	2.5	284	122	19.3	17.7	11.3			10.8	2	4
1292.0	1300.0	C	51.7	31	2.4	283	121	19.4	18.1	11.5			10.7	2	4
1294.0	1302.0	C	59.1	22	2.4	281	120	19.5	18.4	-12.1	5.6			1	4
1296.0	1304.0	D	54.4	286	2.4	280	120	19.2	18.8	10.6	-7.1			2	1
1298.0	1306.0	C	58.0	128	2.4	278	120	19.2	19.1	-16.1	-4.3			2	1
1300.0	1308.0	C	33.7	223	2.4	276	121	19.1	19.2	9.1	3.5	-13.1		1	0

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
1302.0	1310.0	B	37.5	214	2.5	274	121	19.0	19.3	8.2	1.4	-15.4		1	0
1304.0	1312.0	C	37.0	213	2.6	274	122	19.0	19.2	-7.0	-15.1			2	1
1306.0	1314.0	C	50.1	260	2.6	274	122	18.9	19.2	17.6	18.5			1	4
1308.0	1316.0	C	51.6	262	2.5	276	122	18.7	19.2	1.5			-18.4	2	4
1310.0	1318.0	D	37.3	93	2.4	276	126	18.8	19.1	-1.9	7.3			2	1
1312.0	1320.0	D	46.1	94	2.3	276	132	18.7	19.0		-14.1		-1.5	1	2
1314.0	1322.0	C	7.9	284	2.2	277	140	18.9	19.0		2.7		.3	1	2
1316.0	1324.0	C	62.0	239	2.1	277	147	18.7	18.8		1.8		-18.1	1	2
1318.0	1326.0	B	53.8	195	2.0	277	151	18.6	18.5	-17.3	-18.0	18.2		2	0
1322.0	1330.0	D	46.1	278	2.0	276	160	18.5	17.9	13.5	9.4			1	4
1324.0	1332.0	D	60.2	344	2.0	278	164	18.3	18.0	16.3			-16.7	2	4
1326.0	1334.0	C	47.5	13	2.0	279	166	18.2	18.6	13.2	8.5			2	1
1328.0	1336.0	C	49.2	159	2.0	279	166	18.3	18.9		1.7		11.1	2	3
1330.0	1338.0	C	52.6	205	2.0	279	165	18.7	19.2	-.7			-17.9	1	3
1332.0	1340.0	C	53.0	226	2.0	277	164	18.8	19.2		-11.8		-17.8	1	2
1334.0	1342.0	C	40.0	356	2.0	277	165	18.8	19.1	6.7			9.1	1	3
1336.0	1344.0	D	49.1	336	2.0	276	165	18.7	19.1	8.8			-13.2	2	4
1338.0	1346.0	C	48.7	283	1.9	274	166	18.6	19.1	-5.2			-15.5	2	4
1340.0	1348.0	D	63.5	104	1.8	275	166	18.6	19.1		-16.2		7.6	1	2
1342.0	1350.0	D	57.9	182	1.7	272	166	18.7	19.1	-18.6	-8.7			2	1
1344.0	1352.0	D	62.6	230	1.7	272	166	18.7	19.1	9.4	-16.3			1	4
1346.0	1354.0	D	39.8	266	1.8	270	167	18.7	19.0	-7.0			-9.7	2	4
1348.0	1356.0	D	36.5	286	1.9	271	168	18.6	18.9	10.0	6.9			1	4
1350.0	1358.0	C	40.1	316	1.8	270	167	18.6	18.8	11.4	13.7			1	4
1352.0	1360.0	C	50.8	292	1.7	271	167	18.6	18.8	-3.5			-16.9	2	4
1354.0	1362.0	D	3.8	12	1.7	272	168	18.5	18.8	-.6			-.6	2	4
1356.0	1364.0	C	41.9	259	1.6	271	168	18.6	18.8	9.2			-8.7	1	3
1358.0	1366.0	C	46.5	222	1.7	272	168	18.6	18.9	2.8	-11.6	-17.0		1	0
1360.0	1368.0	C	46.6	221	1.7	273	168	18.6	18.9	2.9	-11.8	-17.0		1	0
1362.0	1370.0	C	49.3	223	1.7	274	168	18.6	18.9	3.2			-15.7	1	3
1364.0	1372.0	C	47.4	213	1.6	273	167	18.6	18.8	.2	-14.2	-15.4		1	0
1366.0	1374.0	D	46.6	106	1.5	273	167	18.6	18.7	3.6	16.3			2	1
1368.0	1376.0	C	64.2	245	1.6	274	167	18.5	18.7	15.9	-8.4			1	4
1370.0	1378.0	D	11.9	85	1.6	274	168	18.5	18.6		3.4		1.8	2	3
1372.0	1380.0	C	23.4	185	1.6	271	167	18.5	18.6		-7.5		-5.2	1	2
1374.0	1382.0	B	30.3	36	1.6	268	168	18.7	18.9	.2	7.4	7.6		1	0
1376.0	1384.0	C	48.4	215	1.4	263	171	18.9	19.4	.2	-15.6			1	4
1378.0	1386.0	C	44.5	219	1.4	261	177	19.0	19.8	-.2			-14.0	1	3
1380.0	1388.0	D	41.7	49	1.3	259	182	18.9	19.6	11.6			.5	2	4
1382.0	1390.0	C	49.4	112	1.3	260	185	18.5	19.1	7.1			13.4	2	4
1384.0	1392.0	D	46.9	151	1.3	259	185	18.2	18.7	-13.4	-16.3			1	4
1390.0	1398.0	D	50.3	184	1.3	260	185	18.0	18.3		-.1		10.9	2	3
1400.0	1408.0	C	55.8	61	1.3	255	180	18.3	18.0	-4.7			17.3	1	3
1402.0	1410.0	C	57.8	114	1.4	261	180	18.2	18.0	-18.1			6.9	1	3
1404.0	1412.0	C	50.7	137	1.4	262	178	18.1	18.1		13.7		15.1	2	3
1406.0	1414.0	C	52.8	133	1.3	259	175	18.2	17.8	-16.3			-1.5	1	3
1408.0	1416.0	C	44.1	86	1.4	259	173	18.2	17.3	7.5	16.0			2	1
1410.0	1418.0	C	43.0	87	1.4	261	174	18.0	17.0	7.1			8.0	2	4
1412.0	1420.0	D	40.7	84	1.5	273	176	17.8	17.2	7.3			6.7	2	4
1414.0	1422.0	C	59.0	126	1.5	275	178	17.4	17.3		-17.3		1.9	1	2
1416.0	1424.0	C	29.8	111	1.5	272	180	17.3	17.4		-3.6		2.6	1	2
1418.0	1426.0	B	54.7	103	1.6	268	182	17.5	17.7	9.3			13.8	2	4
1420.0	1428.0	B	52.9	105	1.6	268	183	18.0	18.3	8.9			13.6	2	4
1422.0	1430.0	B	52.5	104	1.6	270	183	18.5	18.8	9.3			13.6	2	4
1424.0	1432.0	B	53.8	109	1.6	273	184	18.7	19.1	-15.0	-6.3			1	4

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
1426.0	1434.0	B	56.1	115	1.6	274	184	18.9	19.3		-9.9		7.7	1	2
1428.0	1436.0	B	58.1	115	1.7	274	184	18.9	19.5	8.3			19.0	2	4
1430.0	1438.0	C	57.8	114	1.7	271	183	19.1	19.5	8.2			18.9	2	4
1432.0	1440.0	B	50.9	112	1.6	271	181	19.1	19.3	6.4			14.6	2	4
1434.0	1442.0	C	51.8	106	1.6	271	179	19.0	19.1		-6.9		7.5	1	2
1436.0	1444.0	C	55.9	109	1.6	273	178	19.0	18.9		-9.6		7.5	1	2
1438.0	1446.0	C	46.4	110	1.7	271	178	19.0	18.9	5.1			12.3	2	4
1440.0	1448.0	B	59.9	102	1.7	270	180	19.1	19.0		-6.8		11.6	1	2
1442.0	1450.0	C	56.1	117	1.6	270	181	19.2	19.1	6.2			18.1	2	4
1444.0	1452.0	C	55.4	118	1.5	269	183	19.2	19.1	6.2			17.7	2	4
1446.0	1454.0	B	51.0	113	1.5	272	183	18.9	18.9		-7.7		6.6	1	2
1448.0	1456.0	C	56.8	108	1.5	268	183	18.8	18.8		-7.4		9.4	1	2
1450.0	1458.0	B	60.1	104	1.4	269	182	18.7	18.8		-6.6		11.8	1	2
1452.0	1460.0	B	61.3	104	1.4	267	182	18.8	18.9		-6.8		12.6	1	2
1454.0	1462.0	B	61.9	104	1.4	266	182	18.9	19.1		-6.7		13.2	1	2
1456.0	1464.0	B	62.9	105	1.5	269	184	18.9	19.2		-6.6		14.0	1	2
1458.0	1466.0	B	59.6	110	1.5	266	186	18.9	19.4	11.3			18.9	2	4
1460.0	1468.0	B	59.2	114	1.5	269	188	18.8	19.5	-19.1	-8.4			1	4
1462.0	1470.0	B	55.9	114	1.5	268	189	18.8	19.6	9.8			16.8	2	4
1464.0	1472.0	B	61.7	116	1.6	272	191	18.8	19.6		-9.0		12.0	1	2
1466.0	1474.0	B	59.9	109	1.5	273	191	18.8	19.7		-4.3		13.7	1	2
1468.0	1476.0	B	55.4	109	1.6	271	191	18.8	19.8	11.6			15.3	2	4
1470.0	1478.0	B	57.0	108	1.5	269	190	19.0	19.9	-16.2	-3.6			1	4
1472.0	1480.0	B	57.5	106	1.5	267	190	19.0	19.7	12.8			16.3	2	4
1474.0	1482.0	B	60.5	105	1.4	264	189	19.0	19.5	-17.8	-3.1			1	4
1476.0	1484.0	C	67.7	108	1.4	263	190	18.7	18.9		-8.3		18.3	1	2
1478.0	1486.0	C	64.9	109	1.4	262	190	18.6	18.6		-6.0		15.5	1	2
1480.0	1488.0	C	71.5	351	1.4	262	190	18.4	18.4	17.1	-17.9			2	1
1484.0	1492.0	B	62.4	98	1.5	266	190	18.3	18.3	16.8			16.1	2	4
1486.0	1494.0	C	52.0	120	1.5	267	190	18.2	18.2	6.6			14.3	2	4
1488.0	1496.0	B	54.6	116	1.5	269	191	18.3	18.3	-15.0	-6.6			1	4
1490.0	1498.0	B	63.9	120	1.6	273	191	18.4	18.4		-11.9		10.7	1	2
1494.0	1502.0	B	70.4	109	1.5	274	187	18.8	18.8		-10.6		18.5	1	2
1496.0	1504.0	C	70.1	107	1.6	272	184	18.9	18.9		-10.5		18.3	1	2
1498.0	1506.0	C	47.1	39	1.6	272	183	18.8	18.8	13.6			-2.4	2	4
1500.0	1508.0	D	51.3	20	1.7	273	183	18.8	18.8	14.2	6.2			2	1
1502.0	1510.0	C	61.6	99	1.7	271	183	18.7	18.7	14.1			18.0	2	4
1504.0	1512.0	C	61.8	97	1.7	269	183	18.8	18.8	15.1			17.5	2	4
1506.0	1514.0	C	60.9	94	1.7	268	182	18.8	18.8	15.2			16.4	2	4
1508.0	1516.0	D	60.8	94	1.7	270	182	18.7	18.7	15.1			16.1	2	4
1510.0	1518.0	D	59.8	2	1.6	272	182	18.3	18.3	15.5			-15.9	2	4
1512.0	1520.0	C	63.5	94	1.7	269	183	17.7	17.7	16.3			16.7	2	4
1514.0	1522.0	B	64.0	96	1.6	263	184	17.3	17.3		-1.4		15.8	1	2
1516.0	1524.0	B	61.3	89	1.6	260	185	17.3	17.3		3.1		16.2	1	2
1518.0	1526.0	C	26.9	335	1.6	257	185	17.5	17.5		7.6		1.4	1	2
1520.0	1528.0	C	48.2	33	1.6	261	185	17.8	17.8	13.0			-4.2	2	4
1522.0	1530.0	C	46.2	42	1.6	264	185	18.1	18.1	12.6			-2.0	2	4
1524.0	1532.0	B	61.8	103	1.6	271	185	18.4	18.4	-18.1	-4.4			1	4
1526.0	1534.0	C	62.1	102	1.7	273	184	18.7	18.7	-18.6	-4.7			1	4
1528.0	1536.0	C	63.5	101	1.7	270	183	18.8	18.8		-5.1		14.8	1	2
1530.0	1538.0	C	65.4	101	1.7	267	183	18.9	18.9		-5.4		16.2	1	2
1532.0	1540.0	C	36.6	117	1.7	265	184	18.9	18.9	3.3			8.8	2	4
1534.0	1542.0	C	55.4	118	1.9	266	185	19.0	19.0	6.5			17.2	2	4
1536.0	1544.0	C	52.8	127	1.9	266	183	19.2	19.2	-16.7	-13.8			1	4
1538.0	1546.0	C	62.6	96	1.9	268	180	19.3	19.3	-18.8			15.4	1	3

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL	CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
1540.0	1548.0 C	69.3	104	1.8	269	178	19.3	19.3		-13.4		15.7	1	2
1542.0	1550.0 C	46.9	111	1.8	271	176	19.2	19.2	4.5			12.9	2	4
1544.0	1552.0 C	52.0	65	1.8	271	176	19.1	19.1	-6.5			15.0	1	3
1546.0	1554.0 C	34.5	16	1.8	271	176	19.1	19.1	8.1	3.8			2	1
1548.0	1556.0 C	35.2	9	1.9	270	176	19.0	19.0	7.8	2.5			2	1
1550.0	1558.0 C	32.8	13	1.9	271	175	19.0	19.0	7.4	3.1			2	1
1552.0	1560.0 C	42.5	118	2.0	272	175	18.9	18.9	-11.3			2.1	1	3
1556.0	1564.0 C	43.0	92	2.0	270	173	18.7	18.7	6.8	16.1			2	1
1558.0	1566.0 B	43.4	100	2.0	269	173	18.8	18.8	5.4	15.8			2	1
1560.0	1568.0 C	38.6	167	2.0	268	173	18.8	18.8		-14.8		-7.1	1	2
1562.0	1570.0 B	51.8	131	2.0	269	173	18.8	18.8		-17.3		-1.4	1	2
1564.0	1572.0 B	52.9	122	2.0	268	172	18.8	18.8	2.0	17.6	15.3		2	0
1566.0	1574.0 D	41.3	123	2.0	268	172	18.7	18.7	.6			11.0	2	4
1570.0	1578.0 D	34.1	157	1.9	268	173	18.4	18.4	-4.6			7.3	2	4
1572.0	1580.0 C	34.2	142	1.9	268	173	18.5	18.5	-2.4			8.2	2	4
1574.0	1582.0 D	18.8	167	1.9	269	171	18.7	18.7	-3.2	-.1			2	1
1584.0	1592.0 C	23.3	346	2.0	270	167	18.4	18.4		8.1		3.6	1	2
1586.0	1594.0 C	13.8	36	2.0	268	168	18.7	18.7		3.1		3.0	1	2
1588.0	1596.0 C	24.1	348	2.0	268	168	18.8	18.8		8.5		4.0	1	2
1590.0	1598.0 C	55.2	115	1.9	268	168	18.6	18.6		-15.4		2.3	1	2
1592.0	1600.0 C	61.7	112	1.9	270	168	18.4	18.4		-17.9		4.1	1	2
1610.0	1618.0 D	69.0	355	1.7	256	196	18.4	18.4	13.3	-17.3			2	1
1612.0	1620.0 D	58.4	115	1.7	255	199	18.4	18.4	12.6			15.7	2	4
1614.0	1622.0 C	54.4	119	1.8	251	203	18.6	18.6	11.0			13.8	2	4
1620.0	1628.0 D	32.0	110	1.6	235	211	19.6	19.6		1.8		6.7	1	2
1624.0	1632.0 D	50.7	238	1.4	230	206	19.6	19.6		-12.6		4.8	2	3
1626.0	1634.0 D	59.9	83	1.4	231	205	19.4	19.4	-5.3	16.7			1	4
1628.0	1636.0 D	55.3	305	1.3	233	204	19.4	19.4		4.6		-11.7	1	2
1630.0	1638.0 C	38.9	314	1.5	236	205	19.3	19.3		4.6		-5.2	1	2
1632.0	1640.0 C	62.2	314	1.5	239	207	19.4	19.4		10.7		-12.6	1	2
1634.0	1642.0 D	66.0	192	1.4	238	209	19.4	19.4	-15.6	12.8			2	1
1638.0	1646.0 D	65.6	194	1.4	236	212	19.4	19.4	-14.5	13.8			2	1
1642.0	1650.0 D	49.3	241	1.5	231	214	19.5	19.5	-16.1	-10.9			2	1
1646.0	1654.0 D	69.4	230	1.5	233	213	19.4	19.4		-16.4		18.8	2	3
1648.0	1656.0 D	55.1	62	1.6	235	213	19.4	19.4	17.8			-5.2	2	4
1650.0	1658.0 D	56.8	58	1.6	233	212	19.4	19.4	18.7			-6.5	2	4
1652.0	1660.0 C	65.4	202	1.5	230	212	19.2	19.2	-18.3	7.6			2	1
1654.0	1662.0 D	43.8	60	1.4	228	212	19.0	19.0		15.3		11.7	1	2
1656.0	1664.0 D	38.3	120	1.4	230	213	18.8	18.8		.3		7.5	1	2
1660.0	1668.0 D	42.3	106	1.4	234	213	18.9	18.9	10.3			5.8	2	4
1662.0	1670.0 C	6.0	251	1.4	233	211	19.2	19.2	-1.7			.2	2	4
1664.0	1672.0 D	53.4	118	1.3	232	210	19.4	19.4		.6		13.1	1	2
1666.0	1674.0 D	53.8	118	1.3	231	210	19.4	19.4		.3		13.1	1	2
1668.0	1676.0 D	52.9	118	1.3	230	209	19.5	19.5		.1		12.7	1	2
1670.0	1678.0 D	47.1	174	1.4	230	209	19.5	19.5	-3.0	12.0			2	1
1672.0	1680.0 C	68.3	191	1.4	229	207	19.6	19.6	-17.7	14.6			2	1
1674.0	1682.0 D	67.3	187	1.4	228	207	19.6	19.6	-15.1	16.4			2	1
1676.0	1684.0 D	64.1	305	1.5	225	206	19.6	19.6		5.4		-17.5	1	2
1678.0	1686.0 D	61.1	299	1.5	225	207	19.6	19.6		1.0		-17.6	1	2
1680.0	1688.0 D	57.1	48	1.6	223	206	19.6	19.6	18.5	10.4			2	1
1682.0	1690.0 D	39.8	61	1.5	222	206	19.6	19.6	10.8	9.0			2	1
1684.0	1692.0 D	67.0	277	1.5	224	205	19.5	19.5	15.0	-15.5			1	4
1686.0	1694.0 B	40.6	178	1.5	223	205	19.4	19.4	-4.7	7.6	15.5		2	0
1688.0	1696.0 C	37.6	193	1.5	222	209	19.4	19.4		-15.2		-5.6	1	2
1690.0	1698.0 C	37.4	205	1.5	217	213	19.5	19.5		-15.6		-6.7	1	2

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	DIA NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
1692.0	1700.0	D	26.4	225	1.5	215	218	19.7	19.6		-10.3		-5.8	1	2
1694.0	1702.0	C	25.3	233	1.5	214	221	19.7	19.7		-9.7		-5.8	1	2
1696.0	1704.0	D	55.7	72	1.5	214	223	19.5	19.4	5.2			18.6	1	3
1698.0	1706.0	D	38.1	301	1.5	214	225	19.3	19.3		-14.5		-5.1	2	3
1700.0	1708.0	D	64.0	288	1.5	214	224	19.0	19.0	8.8	-18.0			1	4
1702.0	1710.0	C	71.4	149	1.5	216	222	19.2	19.2		-17.9		19.1	1	2
1704.0	1712.0	D	58.9	202	1.5	217	222	19.4	19.4	-10.2	11.6			2	1
1712.0	1720.0	C	70.3	121	1.4	209	232	18.6	18.6	-15.6	17.8			1	4
1714.0	1722.0	D	46.3	33	1.5	209	231	19.0	19.0	11.9	17.9			1	4
1720.0	1728.0	D	48.1	248	1.4	208	222	18.6	18.6	-5.4			-14.3	1	3
1722.0	1730.0	D	48.1	245	1.4	208	220	18.6	18.6	-5.4			-14.3	1	3
1724.0	1732.0	D	56.0	44	1.4	207	218	18.7	18.7	14.6			-11.7	2	4
1726.0	1734.0	D	46.9	144	1.4	204	216	18.8	18.8	6.4			13.2	2	4
1728.0	1736.0	D	63.8	113	1.3	202	215	18.9	18.9	-15.1	7.6			1	4
1732.0	1740.0	D	47.5	151	1.4	202	214	18.9	18.9	4.4			14.4	2	4
1734.0	1742.0	D	54.6	189	1.4	203	213	18.9	18.9		11.2		18.4	2	3
1736.0	1744.0	C	58.0	200	1.3	204	212	19.0	19.0	-18.9			-12.5	1	3
1746.0	1754.0	D	25.9	25	1.1	206	203	19.3	19.3	4.4	8.9			1	4
1748.0	1756.0	D	56.7	91	1.2	212	203	19.3	19.3	18.6			8.2	2	4
1750.0	1758.0	B	40.9	96	1.2	216	202	19.3	19.3	-6.6	3.8	16.0		1	0
1752.0	1760.0	C	41.0	96	1.1	217	201	19.2	19.2	-6.0			9.9	1	3
1754.0	1762.0	C	40.7	99	1.1	219	200	19.0	19.0	-6.5			9.3	1	3
1756.0	1764.0	C	38.2	106	1.1	215	199	18.8	18.8	7.6	14.7			2	1
1758.0	1766.0	B	39.9	106	1.1	215	198	18.7	18.7	-8.2	.4	15.4		1	0
1760.0	1768.0	B	40.3	105	1.2	214	198	18.4	18.4	-8.2	.4	15.4		1	0
1762.0	1770.0	B	40.0	105	1.1	217	197	18.1	18.1	-8.2	.4	15.4		1	0
1764.0	1772.0	B	41.2	105	1.1	222	197	17.9	17.9	-8.2	.4	15.4		1	0
1766.0	1774.0	C	47.0	104	1.1	225	197	17.8	17.8		.6		9.6	1	2
1768.0	1776.0	B	43.6	100	1.1	226	196	17.8	17.8		1.4		9.0	1	2
1770.0	1778.0	B	9.3	136	1.2	227	196	17.7	17.7	-2.0			.3	1	3
1772.0	1780.0	C	12.8	85	1.3	229	195	17.7	17.7	2.3	3.5			2	1
1774.0	1782.0	C	22.9	207	1.3	230	195	17.9	17.9	-3.0			-4.8	1	3
1776.0	1784.0	B	22.7	207	1.3	231	195	18.3	18.3	-3.0			-4.9	1	3
1778.0	1786.0	C	20.8	209	1.3	229	194	18.8	18.8		-2.1		2.6	2	3
1780.0	1788.0	B	48.6	254	1.2	232	192	18.5	18.5	4.5	-10.3			1	4
1782.0	1790.0	B	44.1	250	1.1	234	189	17.9	17.9	3.4	-8.9			1	4
1784.0	1792.0	B	29.2	188	1.0	235	188	17.4	17.4	-4.9			-5.2	1	3
1786.0	1794.0	C	25.7	180	1.1	236	187	17.3	17.3	-4.6	-8.5			1	4
1788.0	1796.0	C	39.2	128	1.1	234	188	18.1	18.1		-7.5		2.5	1	2
1790.0	1798.0	C	10.2	101	1.1	233	188	18.9	18.9	-1.8			1.3	1	3
1792.0	1800.0	B	20.8	207	1.1	230	189	19.6	19.6	-2.2	-7.4	-2.6		1	0
1794.0	1802.0	C	44.8	209	1.1	229	189	20.0	20.0		-19.3		-13.2	1	2
1796.0	1804.0	C	31.2	251	1.1	230	189	20.0	20.0		-11.1		-2.6	2	3
1798.0	1806.0	B	31.9	249	1.1	230	188	19.9	19.9	-9.7	-11.2	6.4		2	0
1800.0	1808.0	B	19.6	220	1.2	235	187	19.7	19.7	-1.7	-6.2	-4.1		1	0
1802.0	1810.0	C	23.1	208	1.2	235	185	19.6	19.6	-2.3			-5.8	1	3
1804.0	1812.0	C	30.3	207	1.3	236	184	19.6	19.6	-8.0	-5.0			2	1
1806.0	1814.0	C	35.7	213	1.5	235	181	19.6	19.6	-10.3			2.2	2	4
1808.0	1816.0	C	37.0	210	1.6	233	179	19.7	19.7	-10.7			2.5	2	4
1810.0	1818.0	C	36.4	211	1.5	230	177	19.7	19.6	-10.6			2.0	2	4
1812.0	1820.0	C	41.0	206	1.4	229	175	19.7	19.7	-12.1	-9.3	15.4		2	0
1814.0	1822.0	C	40.5	218	1.3	232	174	19.9	19.9	-12.6			.1	2	4
1816.0	1824.0	B	44.1	220	1.3	240	174	20.0	20.0	-14.3			-.3	2	4
1818.0	1826.0	B	40.5	224	1.3	244	176	19.8	19.8	.7			-12.5	1	3
1820.0	1828.0	B	7.4	30	1.2	246	179	19.5	19.5	.6			1.5	1	3

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL	CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
1822.0	1830.0 B	33.6	206	1.2	246	181	19.2	19.2	-3.1			-8.8	1	3
1824.0	1832.0 B	21.0	191	1.3	239	181	19.0	19.0	-3.8	-7.5	-1.6		1	0
1826.0	1834.0 C	53.4	211	1.3	238	181	19.0	19.0	-4.5			-18.3	1	3
1828.0	1836.0 C	46.1	200	1.3	234	181	19.1	19.1	-13.2			6.1	2	4
1830.0	1838.0 C	55.0	207	1.2	237	181	19.1	19.1	-6.4			-19.0	1	3
1832.0	1840.0 C	47.9	199	1.2	238	180	19.1	19.1	-14.0			6.4	2	4
1834.0	1842.0 B	49.7	204	1.2	240	178	19.1	19.1	-15.5	-10.1			2	1
1836.0	1844.0 C	49.4	210	1.3	244	179	19.0	19.0	-3.7			-15.8	1	3
1838.0	1846.0 B	49.3	212	1.3	245	180	18.9	18.9	-3.6			-15.8	1	3
1840.0	1848.0 B	49.6	210	1.3	243	180	18.8	18.8	-15.7			4.0	2	4
1842.0	1850.0 B	55.5	201	1.3	240	179	18.8	18.8	-7.7			-18.5	1	3
1844.0	1852.0 B	48.0	202	1.2	242	178	18.9	18.9		-9.1		5.2	2	3
1846.0	1854.0 B	48.0	202	1.0	249	177	18.9	18.9		-9.2		5.0	2	3
1848.0	1856.0 C	48.9	202	1.0	251	177	18.8	18.8		-9.6		5.1	2	3
1850.0	1858.0 C	52.9	213	.9	249	178	18.7	18.7	-17.7			3.2	2	4
1852.0	1860.0 B	44.5	210	1.2	240	180	18.7	18.7	-3.3	-16.3	-9.8		1	0
1854.0	1862.0 C	41.8	198	1.2	237	180	18.7	18.7		-16.3		-11.0	1	2
1856.0	1864.0 B	39.1	210	1.1	241	180	18.7	18.7	-2.7			-10.8	1	3
1858.0	1866.0 C	53.0	204	1.2	247	179	18.7	18.7	-17.0			6.1	2	4
1860.0	1868.0 C	38.7	174	1.2	249	179	18.7	18.7	-8.1			-7.1	1	3
1862.0	1870.0 D	38.4	175	1.3	247	179	18.7	18.7	-7.8			-7.3	1	3
1864.0	1872.0 D	23.5	315	1.3	239	179	18.7	18.7		5.7		-.2	1	2
1866.0	1874.0 C	39.0	189	1.2	238	178	18.7	18.7	-9.6	-3.2	15.2		2	0
1868.0	1876.0 B	38.2	191	1.1	233	178	18.6	18.6	-8.5	-3.5	14.7		2	0
1870.0	1878.0 B	38.7	192	1.1	239	179	18.6	18.6	-8.8	-3.7	14.8		2	0
1872.0	1880.0 B	35.7	198	1.0	240	179	18.5	18.5	-4.1			-8.8	1	3
1874.0	1882.0 A	34.7	189	1.1	243	178	18.5	18.5	-8.1	-2.8	12.9		2	0
1876.0	1884.0 B	8.4	65	1.1	244	177	18.8	18.8	-.7			1.5	1	3
1878.0	1886.0 B	45.8	155	1.3	244	176	19.2	19.2		-15.0		-1.3	1	2
1880.0	1888.0 C	45.6	148	1.4	247	176	19.5	19.5		-17.7		-4.4	1	2
1882.0	1890.0 C	43.3	167	1.3	248	176	19.8	19.8	-10.5	-18.6	2.5		1	0
1884.0	1892.0 D	41.2	148	1.3	250	177	19.7	19.7	-3.6			11.5	2	4
1886.0	1894.0 C	33.6	286	1.1	251	177	19.2	19.2	-4.2	-12.5			2	1
1888.0	1896.0 B	41.5	238	1.2	249	178	18.7	18.7	-11.6	-15.0	8.5		2	0
1890.0	1898.0 B	34.6	262	1.1	252	178	18.3	18.3	-8.1	-13.0	1.4		2	0
1892.0	1900.0 D	52.5	215	1.3	256	179	18.3	18.3	-17.3			2.4	2	4
1894.0	1902.0 C	24.7	199	1.2	260	178	18.4	18.4	-2.3			-5.7	1	3
1896.0	1904.0 C	36.2	201	1.0	268	176	18.6	18.6		-5.9		3.2	2	3
1898.0	1906.0 C	57.4	64	1.0	262	174	18.9	18.9	-8.7			18.2	1	3
1900.0	1908.0 C	51.9	201	1.1	258	171	19.3	19.3	-17.2	-12.7			2	1
1902.0	1910.0 B	49.4	205	1.2	248	172	19.6	19.6	-3.2	-19.6	-13.3		1	0
1904.0	1912.0 C	49.2	204	1.2	244	173	19.6	19.6	-16.2	-12.1			2	1
1906.0	1914.0 C	24.0	186	1.1	244	174	19.6	19.6		-8.8		-5.4	1	2
1908.0	1916.0 B	28.8	193	1.0	258	174	19.6	19.6	-3.3	-10.2	-3.9		1	0
1910.0	1918.0 C	24.7	189	1.0	259	173	19.5	19.5	-2.9	-8.7			1	4
1912.0	1920.0 C	24.8	184	1.0	263	174	19.2	19.2	-3.4	-8.8			1	4
1914.0	1922.0 C	51.2	151	1.2	261	175	19.2	19.2	-15.5			-6.3	1	3
1916.0	1924.0 B	39.1	161	1.2	259	176	19.2	19.2	-6.7	3.6	15.1		2	0
1918.0	1926.0 B	38.3	163	1.1	260	175	19.2	19.2	-6.8	2.9	14.8		2	0
1920.0	1928.0 B	24.5	233	1.2	254	174	19.2	19.2	-6.5	-7.9	4.6		2	0
1922.0	1930.0 C	25.4	237	1.2	250	174	19.3	19.3		-4.2		-6.4	1	2
1924.0	1932.0 B	26.8	223	1.2	250	174	19.2	19.2	.7			-7.2	1	3
1926.0	1934.0 B	32.3	223	1.2	256	174	19.1	19.1	.8			-8.8	1	3
1928.0	1936.0 A	44.9	224	1.1	259	172	19.1	19.1	-14.3	-15.5	12.0		2	0
1930.0	1938.0 A	44.7	221	1.2	257	171	19.2	19.2	-14.1	-15.2	12.4		2	0

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ ANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	DIA NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
1932.0	1940.0	A	44.6	221	1.2	251	171	19.2	19.2	-14.2	-15.2	12.4		2	0
1934.0	1942.0	B	49.1	190	1.2	251	171	18.8	18.8	-14.2			6.6	2	4
1936.0	1944.0	B	26.8	192	1.2	251	171	18.6	18.6		-8.8		-6.3	1	2
1938.0	1946.0	C	35.0	211	1.1	253	170	18.5	18.5	-9.4	-8.8			2	1
1940.0	1948.0	C	37.2	203	1.1	258	170	18.5	18.5	-10.0	-8.0			2	1
1942.0	1950.0	B	36.2	214	1.1	261	170	18.4	18.4	-9.5	-9.8	9.8		2	0
1944.0	1952.0	C	49.3	266	1.2	262	170	18.3	18.3	-10.0			-12.1	2	4
1946.0	1954.0	C	49.6	261	1.1	259	170	18.3	18.3	11.5			-10.8	1	3
1948.0	1956.0	C	49.9	260	1.1	256	169	18.3	18.3	11.5			-11.0	1	3
1950.0	1958.0	B	52.0	255	1.1	256	168	18.3	18.3	-12.8			-11.6	2	4
1952.0	1960.0	C	55.0	3	1.2	258	167	18.4	18.4	15.9	6.6			2	1
1954.0	1962.0	B	46.2	232	1.2	263	167	18.5	18.5	-13.5	-18.1	8.3		2	0
1956.0	1964.0	C	44.6	230	1.1	261	166	18.5	18.5	4.0	-8.0	-17.1		1	0
1958.0	1966.0	B	42.9	232	1.1	265	165	18.5	18.5	4.9	-6.7	-16.5		1	0
1960.0	1968.0	B	57.4	249	1.1	264	165	18.5	18.5		-3.2		-16.7	1	2
1962.0	1970.0	B	32.2	189	1.1	261	164	18.6	18.6	-8.4	-5.2	10.7		2	0
1964.0	1972.0	B	31.9	230	1.1	262	164	18.9	18.9		-4.8		-8.0	1	2
1966.0	1974.0	B	31.6	191	1.1	261	163	19.3	19.3		-10.6		-8.2	1	2
1968.0	1976.0	B	31.3	191	1.2	263	163	19.7	19.7		-10.6		-8.3	1	2
1970.0	1978.0	B	57.9	242	1.3	268	164	19.7	19.7	13.0	-6.4			1	4
1972.0	1980.0	C	27.1	123	1.3	271	164	19.4	19.4		-7.4		-.7	1	2
1974.0	1982.0	C	45.2	110	1.4	277	163	19.1	19.1		14.7		12.8	2	3
1976.0	1984.0	C	45.2	109	1.3	279	162	18.9	18.9		14.5		12.7	2	3
1978.0	1986.0	B	46.7	97	1.3	278	161	18.8	18.8	4.4			12.7	2	4
1980.0	1988.0	B	45.2	107	1.3	274	160	18.7	18.7		14.4		12.6	2	3
1982.0	1990.0	B	44.6	111	1.2	270	158	18.7	18.7	-12.5			.4	1	3
1984.0	1992.0	B	22.9	137	1.2	269	157	18.7	18.6	-3.1	2.3	7.3		2	0
1986.0	1994.0	B	22.5	146	1.3	268	155	18.7	18.6	-4.0	-7.5	.8		1	0
1988.0	1996.0	D	5.4	276	1.4	267	153	18.8	18.6	2.4	1.2	-1.9		1	0
1990.0	1998.0	D	5.2	271	1.4	267	151	18.8	18.6	2.1	1.0	-1.9		1	0
1992.0	2000.0	C	7.7	303	1.4	269	150	18.7	18.6	2.0			.4	1	3
1994.0	2002.0	C	7.7	302	1.4	273	149	18.6	18.7	2.0			.5	1	3
1996.0	2004.0	C	2.0	220	1.4	277	148	18.6	18.7	-.5			-.5	2	4
1998.0	2006.0	B	19.9	26	1.5	279	146	18.7	18.8		3.7		4.6	1	2
2000.0	2008.0	B	19.1	24	1.5	278	144	18.9	19.0		3.6		4.5	1	2
2002.0	2010.0	B	12.3	181	1.6	279	142	19.2	19.3	-2.9	-3.0			2	1
2004.0	2012.0	C	9.0	186	1.6	278	141	19.4	19.5	-2.2	-2.5			2	1
2006.0	2014.0	B	8.9	176	1.6	279	141	19.5	19.7	-1.9	-2.1	2.1		2	0
2008.0	2016.0	B	12.0	178	1.5	284	141	19.5	19.7	-2.6	-2.8	2.9		2	0
2010.0	2018.0	B	14.8	165	1.5	283	142	19.5	19.7	-2.5	-2.4	4.3		2	0
2012.0	2020.0	D	31.3	153	1.5	284	144	19.5	19.7	-4.5			-6.7	1	3
2022.0	2030.0	C	41.3	182	1.6	276	141	19.6	19.6	-12.1	-11.9			2	1
2026.0	2034.0	C	49.1	260	1.5	275	141	19.6	19.6	16.2			-4.6	1	3
2028.0	2036.0	B	55.3	262	1.5	272	141	19.6	19.7		15.7		-4.9	1	2
2030.0	2038.0	C	50.1	35	1.4	274	141	19.6	19.7	14.4			7.7	2	4
2032.0	2040.0	C	32.2	122	1.4	277	141	19.6	19.8	-3.7			7.4	2	4
2034.0	2042.0	D	42.7	29	1.4	278	140	19.6	19.8	11.7			4.9	2	4
2036.0	2044.0	C	51.0	260	1.5	280	140	19.6	19.9		12.9		-4.7	1	2
2038.0	2046.0	C	34.5	307	1.6	279	139	19.6	19.9	8.6	13.9	-3.3		1	0
2040.0	2048.0	C	33.8	310	1.6	276	140	19.6	20.0	8.5	13.5	-2.8		1	0
2042.0	2050.0	C	56.6	299	1.6	274	140	19.6	20.0	8.6	-11.9			2	1
2044.0	2052.0	D	32.2	271	1.6	276	142	19.6	20.0	9.3	8.3			1	4
2046.0	2054.0	C	21.3	151	1.6	278	145	19.6	20.0	-4.2			3.0	2	4
2048.0	2056.0	C	41.7	175	1.7	280	147	19.6	20.0	-11.8			3.2	2	4
2050.0	2058.0	C	24.9	164	1.7	280	149	19.6	20.0		-2.8		2.8	2	3

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	DIA NO.1	DIA 13	DIA 24	HBL	DISPLACEMENTS HBO	HLR	HBR	BASE ARM	M
2052.0	2060.0	C	63.6	313	1.7	281	151	19.6	20.0	13.2	-13.6			2	1
2054.0	2062.0	C	57.9	310	1.7	280	154	19.6	20.0	8.1	-14.0			2	1
2056.0	2064.0	C	63.8	41	1.6	279	159	19.6	20.0	-7.8	18.6			1	4
2058.0	2066.0	C	39.9	178	1.5	276	162	19.5	20.0	-5.2			-10.3	1	3
2060.0	2068.0	D	58.3	143	1.5	273	163	19.4	19.9	-19.5			-9.2	1	3
2064.0	2072.0	C	50.3	294	1.5	272	162	19.3	19.8		16.5		-1.1	1	2
2066.0	2074.0	C	56.3	263	1.5	271	165	19.3	19.7		4.2		-13.4	1	2
2068.0	2076.0	D	47.7	293	1.4	272	171	19.3	19.7	15.5			-3.9	1	3
2070.0	2078.0	D	38.5	72	1.3	271	179	19.2	19.8	-5.1	4.2			1	4
2072.0	2080.0	C	61.4	3	1.3	270	183	19.3	19.9	17.2			-18.1	2	4
2080.0	2088.0	D	57.7	284	1.0	264	182	19.3	19.9	-12.9			-19.0	2	4
2082.0	2090.0	C	65.2	291	1.0	264	184	19.3	19.8		13.0		-14.8	1	2
2086.0	2094.0	D	54.7	331	1.0	264	184	19.3	19.6	3.9			-19.3	2	4
2090.0	2098.0	D	57.7	198	1.0	262	185	19.4	19.8	-18.9			11.5	2	4
2092.0	2100.0	D	49.6	210	1.0	252	187	19.5	19.7	-15.5			5.9	2	4
2094.0	2102.0	C	65.6	294	.9	254	188	19.4	19.6		11.7		-15.7	1	2
2096.0	2104.0	D	47.6	215	.9	254	190	19.4	19.5	-14.5			5.1	2	4
2098.0	2106.0	C	57.8	281	.9	266	192	19.3	19.4	-16.0			-15.7	2	4
2100.0	2108.0	C	66.2	271	1.0	267	193	19.3	19.3	17.5	-9.7			1	4
2102.0	2110.0	C	71.1	30	.9	266	194	19.4	19.3		15.3		-18.7	2	3
2104.0	2112.0	C	67.0	272	.8	265	194	19.4	19.3	18.0	-10.3			1	4
2106.0	2114.0	D	67.0	272	.8	264	194	19.4	19.3	17.9	-10.4			1	4
2108.0	2116.0	C	68.8	269	.9	266	194	19.3	19.2	17.8	-14.3			1	4
2110.0	2118.0	D	54.8	352	1.0	267	195	19.3	19.1		-11.0		-18.0	2	3
2112.0	2120.0	D	47.0	340	1.0	269	196	19.3	19.1		-12.2		-14.6	2	3
2114.0	2122.0	D	53.7	353	1.0	271	196	19.3	19.1	6.9			-17.3	2	4
2116.0	2124.0	D	46.8	303	.9	269	195	19.3	19.2		6.3		-6.9	1	2
2118.0	2126.0	C	28.7	72	.8	270	195	19.3	19.3		5.6		7.1	1	2
2120.0	2128.0	C	60.1	151	.9	269	195	19.4	19.4		-15.4		7.4	1	2
2122.0	2130.0	C	53.1	349	1.0	269	195	19.4	19.5	17.5			5.7	1	3
2124.0	2132.0	C	53.9	134	1.0	267	195	19.4	19.6	4.8			17.9	2	4
2126.0	2134.0	C	27.8	112	.9	263	194	19.5	19.6	4.2			5.7	2	4
2128.0	2136.0	C	37.2	202	.9	261	195	19.5	19.7	-8.5			6.3	2	4
2130.0	2138.0	C	47.7	264	1.0	264	196	19.6	19.8	-14.5			-6.3	2	4
2132.0	2140.0	D	38.4	111	1.0	264	198	19.6	19.8	7.0			8.1	2	4
2134.0	2142.0	C	32.4	24	1.0	262	199	19.5	19.7	6.5			-5.7	2	4
2136.0	2144.0	B	60.5	22	.9	261	199	19.5	19.7	16.0			17.8	1	3
2138.0	2146.0	B	66.2	120	.9	261	198	19.4	19.5		-8.5		16.8	1	2
2140.0	2148.0	C	64.3	130	.9	262	198	19.4	19.4		-14.9		10.8	1	2
2142.0	2150.0	D	55.4	130	.9	263	198	19.3	19.3	7.5			17.9	2	4
2144.0	2152.0	D	33.6	201	.9	260	198	19.2	19.2	-6.9			6.0	2	4
2146.0	2154.0	C	57.9	314	.9	259	198	19.1	19.1		13.7		-7.2	1	2
2148.0	2156.0	C	56.1	268	.9	259	198	19.1	19.1	-18.8			-8.8	2	4
2150.0	2158.0	C	61.5	271	.9	260	198	19.2	19.1	12.1	-10.8			1	4
2152.0	2160.0	C	68.8	39	.9	258	199	19.2	19.2		16.0		-14.5	2	3
2154.0	2162.0	C	52.4	62	.9	255	200	19.2	19.2	17.1	16.2			2	1
2156.0	2164.0	C	54.2	339	.9	252	201	19.2	19.3	.7	-18.2			2	1
2158.0	2166.0	C	59.3	295	.9	253	202	19.2	19.2	-15.8			-17.4	2	4
2160.0	2168.0	C	63.9	274	.9	254	203	19.2	19.2	12.4	-13.7			1	4
2162.0	2170.0	C	67.8	277	.9	253	203	19.2	19.2	16.5	-14.0			1	4
2164.0	2172.0	D	49.2	325	.8	252	203	19.2	19.1	15.3			-3.6	1	3
2166.0	2174.0	D	54.3	21	.8	251	203	19.1	18.9	13.6			12.4	1	3
2170.0	2178.0	C	70.7	274	.9	252	203	19.1	18.8	17.3	-18.5			1	4
2172.0	2180.0	B	70.8	275	1.0	253	203	19.1	18.9	17.9	-18.3			1	4
2174.0	2182.0	C	69.1	276	.9	252	203	19.1	19.0	17.0	-15.7			1	4

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL	CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	DIA NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
2176.0	2184.0	D 54.5	359	.9	253	204	19.1	19.0	6.4			-17.6	2	4
2178.0	2186.0	D 68.4	39	.9	253	204	19.1	19.0		11.3		-16.9	2	3
2180.0	2188.0	D 30.7	287	.9	254	205	19.1	19.0		-1.6		-6.5	1	2
2182.0	2190.0	C 26.4	243	.9	254	205	19.0	19.0	-.8			-6.9	1	3
2184.0	2192.0	C 38.7	121	.9	257	205	19.0	18.9	6.5			8.2	2	4
2186.0	2194.0	C 42.7	211	1.0	258	206	19.0	18.9	-9.9			8.0	2	4
2188.0	2196.0	C 44.3	209	1.0	261	206	19.0	18.9	-8.9	-18.9			1	4
2190.0	2198.0	D 29.0	129	1.0	261	206	19.0	18.9		-2.4		3.7	1	2
2192.0	2200.0	C 42.6	203	1.0	258	207	19.0	19.0		-17.8		-8.5	1	2
2194.0	2202.0	C 40.6	333	1.0	256	207	19.1	19.0	-2.0			-11.5	2	4
2198.0	2206.0	C 65.6	51	1.0	254	208	19.2	19.1		15.6		-10.9	2	3
2200.0	2208.0	B 65.1	51	1.0	253	209	19.2	19.0		14.9		-10.9	2	3
2202.0	2210.0	C 64.5	53	.9	252	209	19.2	18.9		15.2		-10.2	2	3
2204.0	2212.0	D 60.7	278	.9	251	210	19.2	18.8	9.3	-13.5			1	4
2206.0	2214.0	D 60.3	278	.9	249	210	19.1	18.8	9.2	-13.1			1	4
2208.0	2216.0	C 59.5	278	1.0	249	209	19.1	18.8	9.2	-12.2			1	4
2214.0	2222.0	D 39.2	357	1.0	251	207	19.0	18.7	2.7			-10.5	2	4
2216.0	2224.0	C 37.8	269	1.0	253	206	19.1	18.8		-13.4		-3.2	2	3
2218.0	2226.0	C 15.1	333	1.0	255	205	19.1	18.8	3.6			-.7	1	3
2220.0	2228.0	C 47.3	54	.9	258	204	19.1	18.9		9.7		-3.9	2	3
2222.0	2230.0	D 41.6	155	.9	257	203	19.2	18.9		-11.4		.4	1	2
2224.0	2232.0	D 40.5	155	.9	257	203	19.2	19.0		-11.3		.2	1	2
2226.0	2234.0	D 8.7	333	.9	259	202	19.3	19.0		1.8		-.3	1	2
2228.0	2236.0	C 44.4	351	.9	258	201	19.3	19.1		16.1		3.2	1	2
2230.0	2238.0	B 51.9	284	1.0	258	201	19.3	19.2		-3.4		-14.2	1	2
2232.0	2240.0	C 53.0	299	.9	255	201	19.4	19.3	-11.5			-15.3	2	4
2234.0	2242.0	C 56.0	270	1.0	254	201	19.4	19.5	-19.4			-8.5	2	4
2236.0	2244.0	C 54.0	42	1.0	254	201	19.4	19.7	16.4			-7.3	2	4
2238.0	2246.0	C 25.3	183	1.0	257	200	19.5	19.8	-3.2			5.7	2	4
2240.0	2248.0	C 33.5	94	1.0	259	199	19.6	19.9	7.7			4.6	2	4
2242.0	2250.0	D 56.5	33	.9	260	199	19.6	19.9	17.5	6.7			2	1
2244.0	2252.0	D 54.9	318	.9	258	200	19.6	19.9	19.2			-6.5	1	3
2246.0	2254.0	D 40.5	156	1.0	258	202	19.5	19.9		-11.7		.1	1	2
2248.0	2256.0	C 44.2	252	1.0	256	203	19.5	19.8		-12.8		-14.0	1	2
2250.0	2258.0	C 55.6	257	1.0	251	203	19.4	19.8	3.4	-17.5			1	4
2252.0	2260.0	C 65.6	273	1.0	250	204	19.5	19.8	13.2	-16.0			1	4
2254.0	2262.0	C 67.1	276	1.0	250	205	19.5	19.9	15.2	-16.0			1	4
2256.0	2264.0	C 42.7	354	.9	253	205	19.5	19.8	12.4	15.1			1	4
2258.0	2266.0	C 41.9	358	.9	257	206	19.5	19.7		15.2		3.4	1	2
2260.0	2268.0	C 41.7	357	1.0	256	207	19.5	19.6		14.8		3.0	1	2
2262.0	2270.0	C 28.4	45	1.0	256	207	19.5	19.6	6.3	3.0			2	1
2264.0	2272.0	B 21.0	185	1.0	254	207	19.4	19.6	-4.9			-2.3	1	3
2266.0	2274.0	C 40.5	7	1.0	253	208	19.4	19.6		15.2		4.4	1	2
2268.0	2276.0	C 57.6	203	1.0	254	209	19.5	19.6	-14.2			17.2	2	4
2270.0	2278.0	C 53.3	193	1.0	251	211	19.5	19.5	-8.7			16.7	2	4
2272.0	2280.0	C 32.3	277	1.0	251	213	19.5	19.4	-8.6	-11.3			2	1
2274.0	2282.0	C 32.0	278	1.0	242	215	19.4	19.3	-8.4	-10.9			2	1
2276.0	2284.0	B 32.5	277	1.0	236	217	19.4	19.4	-8.7	-10.8			2	1
2278.0	2286.0	C 35.3	260	1.0	234	219	19.3	19.5	-10.0	-9.2			2	1
2280.0	2288.0	C 55.6	96	1.0	241	222	19.3	19.6		15.9		19.2	1	2
2282.0	2290.0	C 33.0	256	1.0	244	225	19.4	19.7	-9.0	-6.9			2	1
2284.0	2292.0	C 41.6	225	1.0	244	226	19.5	19.7	-8.9	.2			2	1
2286.0	2294.0	C 28.8	256	1.0	235	226	19.5	19.8	-7.7	-5.6			2	1
2288.0	2296.0	C 68.4	245	1.0	234	225	19.5	19.8		-17.1		15.9	2	3
2290.0	2298.0	C 43.9	285	1.1	233	226	19.5	19.7	-13.4	-16.4			2	1

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL	CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
2292.0	2300.0 B	47.8	274	1.2	231	228	19.5	19.7	-15.7	-16.0			2	1
2294.0	2302.0 C	46.1	277	1.1	225	229	19.5	19.7	-14.8	-15.3			2	1
2296.0	2304.0 D	47.7	241	1.1	217	230	19.6	19.8	-13.0	-4.2			2	1
2298.0	2306.0 C	44.4	239	1.0	219	230	19.5	19.8	-11.3	-2.9			2	1
2300.0	2308.0 C	59.2	239	1.1	223	232	19.5	19.8	-18.8	-3.8			2	1
2302.0	2310.0 C	38.8	115	1.0	226	234	19.2	19.6	-3.2			10.5	1	3
2304.0	2312.0 C	18.6	101	1.1	226	239	18.5	19.1	.0			4.3	1	3
2306.0	2314.0 C	42.8	292	1.1	225	245	17.8	18.7	.5			-12.2	1	3
2308.0	2316.0 C	53.3	276	1.1	223	249	17.7	18.9	-16.6	-11.4			2	1
2310.0	2318.0 C	53.2	286	1.1	220	250	18.2	19.3	-17.6	-14.8			2	1
2312.0	2320.0 C	54.4	282	1.1	217	249	18.7	19.5	-18.7	-14.9			2	1
2314.0	2322.0 D	46.2	328	1.2	218	249	19.1	19.5	7.8			-11.8	1	3
2316.0	2324.0 D	41.3	316	1.2	219	251	19.3	19.5	3.9			-11.4	1	3
2318.0	2326.0 C	55.2	250	1.2	222	254	19.3	19.5	-15.5			-13.4	1	3
2320.0	2328.0 C	40.0	272	1.2	222	256	19.3	19.5	-10.3			5.9	2	4
2322.0	2330.0 B	46.3	267	1.2	220	256	19.4	19.6	-12.1			8.3	2	4
2324.0	2332.0 B	44.3	275	1.1	220	256	19.3	19.6	-12.0	-5.9	18.3		2	0
2326.0	2334.0 C	41.5	275	1.1	218	256	19.3	19.5	-11.0	-5.4			2	1
2328.0	2336.0 B	41.4	275	1.1	219	255	19.2	19.3	-10.9	-5.5			2	1
2330.0	2338.0 C	39.5	287	1.2	217	254	19.1	19.2	-14.0			2.5	2	4
2332.0	2340.0 B	40.5	274	1.1	215	253	19.0	19.2	-10.8	-5.6	15.7		2	0
2334.0	2342.0 B	36.6	280	1.2	213	254	19.1	19.3	-9.6	-6.0			2	1
2336.0	2344.0 B	43.0	288	1.2	213	257	19.1	19.5		-15.6		-12.4	1	2
2338.0	2346.0 B	38.8	282	1.3	215	260	19.0	19.6	-10.1			4.5	2	4
2340.0	2348.0 B	37.8	288	1.4	217	263	19.1	19.8	-10.0			3.8	2	4
2342.0	2350.0 C	47.3	262	1.4	219	266	19.2	19.9	-9.8	2.0			2	1
2344.0	2352.0 C	37.2	294	1.5	220	270	19.2	19.9	-9.8			4.0	2	4
2346.0	2354.0 C	40.9	12	1.5	221	271	19.2	19.8		2.6		-6.8	1	2
2348.0	2356.0 A	49.5	357	1.5	221	272	18.5	19.3	9.0	-1.9			1	4
2350.0	2358.0 A	44.6	5	1.6	224	272	18.0	18.5	9.1	.5	-17.5		1	0
2352.0	2360.0 C	39.2	31	1.5	221	272	18.1	18.1	-2.7			-9.5	2	4
2354.0	2362.0 B	5.0	289	1.4	220	275	19.6	19.3	-.4	.0	2.0		2	0
2356.0	2364.0 C	39.8	220	1.5	221	279	20.0	20.6	3.4			12.2	2	4
2358.0	2366.0 C	46.8	231	1.6	225	284	19.8	20.9	2.9			16.1	2	4
2360.0	2368.0 C	50.5	232	1.8	225	288	19.1	20.1	4.0			17.6	2	4
2362.0	2370.0 D	30.4	94	1.7	222	291	19.2	19.5	3.9			-6.6	2	4
2364.0	2372.0 B	51.5	242	1.7	220	293	19.5	19.4	2.0			18.2	2	4
2366.0	2374.0 D	11.0	9	1.6	224	298	19.4	19.4		-1.4		-2.2	1	2
2368.0	2376.0 D	45.7	154	1.8	230	304	19.1	19.4	13.7			-3.2	2	4
2370.0	2378.0 C	47.1	206	1.9	230	311	18.7	19.2	13.2			8.0	2	4
2372.0	2380.0 C	55.2	295	2.1	228	315	18.8	19.2	-7.8			18.1	2	4
2374.0	2382.0 C	52.0	290	2.1	225	318	19.1	19.7	-4.7			17.4	2	4
2376.0	2384.0 C	53.7	291	2.2	225	321	19.2	19.9	-4.4			18.8	2	4
2378.0	2386.0 C	51.6	298	2.1	226	321	19.2	19.4	-6.0			16.5	2	4
2380.0	2388.0 C	59.3	233	2.2	230	322	19.6	19.3	-18.1			17.3	1	3
2382.0	2390.0 C	52.9	284	2.0	232	322	20.1	19.6		17.1		19.4	2	3
2384.0	2392.0 C	69.0	160	1.9	232	322	20.1	20.3		17.1		-17.1	2	3
2386.0	2394.0 C	50.0	280	1.9	231	323	19.6	20.6	.3	18.0			2	1
2388.0	2396.0 C	50.9	283	2.1	235	326	19.2	20.2	.2	18.2			2	1
2390.0	2398.0 B	51.8	285	2.1	235	328	18.8	19.4	-.1	17.9			2	1
2392.0	2400.0 C	52.3	289	2.1	232	329	18.4	18.7		-18.5		-.8	1	2
2394.0	2402.0 A	45.3	292	2.1	231	331	18.4	18.5	-1.7	12.7	14.6		2	0
2396.0	2404.0 B	47.3	290	2.0	232	333	18.4	18.7	-14.7			-.2	1	3
2398.0	2406.0 B	37.7	296	2.1	234	334	19.1	19.5	-.8			10.9	2	4
2400.0	2408.0 B	13.9	272	1	235	333	19.9	21.3	1.6			3.9	2	4

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
2402.0	2410.0	B	59.4	261	2.1	235	334	20.7	22.5		-11.1		14.1	1	2
2404.0	2412.0	B	48.5	277	2.1	235	335	21.2	22.8		-13.0		5.1	1	2
2408.0	2416.0	C	21.4	128	2.2	239	345	20.0	20.7	5.3			1.2	1	3
2410.0	2418.0	C	40.3	155	2.4	240	352	19.0	19.4	5.9	-3.9			2	1
2412.0	2420.0	B	55.1	293	2.4	240	355	18.7	19.0		-12.5		6.7	1	2
2414.0	2422.0	B	57.2	296	2.5	244	357	18.8	19.1		-14.4		6.8	1	2
2416.0	2424.0	C	51.9	297	2.6	247	359	18.9	19.2	5.9			17.4	2	4
2418.0	2426.0	C	35.4	307	2.6	248	360	19.2	20.5	2.3			10.4	2	4
2420.0	2428.0	B	43.8	229	2.5	246	0	19.6	21.0	15.0			1.7	2	4
2422.0	2430.0	B	40.9	242	2.4	246	3	19.9	21.2	13.3			3.8	2	4
2424.0	2432.0	B	53.6	285	2.4	250	8	19.7	21.1	-16.8	-2.8			1	4
2426.0	2434.0	B	64.7	299	2.6	252	11	19.6	21.9		-13.4		17.3	1	2
2428.0	2436.0	B	63.9	301	2.6	253	11	19.6	21.5		-13.6		15.9	1	2
2430.0	2438.0	C	58.4	306	2.6	252	12	19.5	21.4		-12.6		10.9	1	2
2432.0	2440.0	C	57.5	176	2.6	252	14	19.3	20.9	19.7			10.1	1	3
2434.0	2442.0	C	63.2	181	2.7	253	17	19.0	20.1	13.3	-11.1			2	1
2436.0	2444.0	C	49.8	288	2.7	253	21	18.8	19.5	13.5			11.5	2	4
2438.0	2446.0	C	52.3	300	2.7	254	26	18.7	19.1	-13.9	-1.5			1	4
2440.0	2448.0	C	51.2	303	2.7	256	30	18.7	18.8	12.1			12.9	2	4
2442.0	2450.0	C	57.7	300	2.7	257	33	18.7	18.8	-15.0	2.2			1	4
2444.0	2452.0	D	55.4	311	2.7	258	36	18.6	18.8	13.6			15.4	2	4
2446.0	2454.0	C	54.2	291	2.7	258	38	18.6	18.7	17.9			9.0	2	4
2448.0	2456.0	B	52.4	286	2.7	259	40	18.5	18.6	-6.7	10.7			1	4
2450.0	2458.0	A	40.2	277	2.8	259	41	18.4	18.5	-1.8	9.8	14.0		1	0
2452.0	2460.0	A	43.0	283	2.7	260	43	18.4	18.4	12.1	16.0	-9.8		2	0
2454.0	2462.0	B	40.3	281	2.7	262	46	18.4	18.3	11.1	15.8	-9.9		2	0
2456.0	2464.0	C	37.2	300	2.7	261	48	18.4	18.3	9.7	14.0			2	1
2458.0	2466.0	C	36.9	297	2.6	262	50	18.4	18.2	9.9	13.4			2	1
2460.0	2468.0	C	35.0	314	2.6	262	52	18.4	18.1	8.0	13.3	-2.5		2	0
2462.0	2470.0	D	14.3	331	2.6	262	53	18.4	18.1	2.5			2.5	2	4
2464.0	2472.0	C	21.1	181	2.6	262	53	18.5	18.1	.0			-5.1	2	4
2466.0	2474.0	C	20.6	185	2.6	260	53	18.6	18.1	.4			-5.1	2	4
2468.0	2476.0	C	45.7	246	2.6	259	52	18.6	18.2	7.7			12.6	1	3
2470.0	2478.0	C	45.8	245	2.6	258	52	18.6	18.2	7.7			12.6	1	3
2472.0	2480.0	C	45.6	244	2.7	256	51	18.7	18.3	7.7			12.6	1	3
2474.0	2482.0	D	44.5	247	2.7	256	49	18.7	18.5	6.5			12.7	1	3
2476.0	2484.0	C	52.5	307	2.7	256	49	18.6	18.6		5.7		15.4	1	2
2478.0	2486.0	C	47.3	273	2.7	257	49	18.7	18.7	.3			15.6	1	3
2480.0	2488.0	C	47.9	277	2.6	258	50	18.7	18.7	-.3			16.0	1	3
2482.0	2490.0	B	48.3	279	2.6	258	52	18.7	18.7	-1.1	16.1	16.3		1	0
2484.0	2492.0	B	45.4	299	2.6	259	55	18.8	18.7	-4.1	9.4	18.1		1	0
2486.0	2494.0	C	53.3	295	2.6	261	57	18.9	18.7	-4.2	14.7			1	4
2488.0	2496.0	C	40.6	306	2.6	262	59	19.0	18.7	11.5			4.1	2	4
2490.0	2498.0	C	46.5	304	2.6	262	61	19.1	18.8	-4.2			14.4	1	3
2492.0	2500.0	C	45.8	302	2.6	262	63	19.2	18.8	-3.2			14.4	1	3
2494.0	2502.0	C	42.4	68	2.6	260	64	19.2	18.8	-7.5			-8.5	1	3
2496.0	2504.0	D	51.7	322	2.6	260	67	19.2	18.9	15.6			8.3	2	4
2498.0	2506.0	C	44.9	2	2.6	262	69	19.3	19.0	5.5			12.1	2	4
2500.0	2508.0	D	53.6	334	2.6	265	71	19.6	19.4	-11.3			15.7	1	3
2502.0	2510.0	C	29.4	234	2.6	266	74	20.2	20.0		11.8		4.0	1	2
2504.0	2512.0	C	26.7	283	2.5	265	77	20.8	20.5	7.6			-2.8	2	4
2506.0	2514.0	C	43.8	136	2.4	264	80	21.2	20.9	-13.2			-2.8	2	4
2508.0	2516.0	C	23.7	286	2.4	263	84	21.1	20.8	6.6			-3.1	2	4
2510.0	2518.0	D	24.8	60	2.4	264	88	20.3	20.2	-5.8			-1.5	1	3
2512.0	2520.0	B	7.0	2	2.4	266	92	19.5	19.5	1.5			.7	2	4

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X60

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	DIA NO.1	DIA 13	DIA 24	DISPLACEMENTS NBL	HBO	HLR	HBR	BASE ARM	M
2514.0	2522.0	B	20.6	244	2.4	268	95	18.8	18.8	1.6	-3.8			2	1
2516.0	2524.0	B	21.6	246	2.3	268	97	18.5	18.3	1.6	-3.9			2	1
2518.0	2526.0	C	47.0	289	2.3	268	99	18.5	18.4	8.7			12.3	1	3
2520.0	2528.0	C	46.9	290	2.3	268	101	18.6	18.4	9.0			12.1	1	3
2522.0	2530.0	B	43.8	288	2.3	268	103	18.7	18.6	8.8			10.5	1	3
2524.0	2532.0	B	43.6	289	2.3	269	104	18.8	18.8	8.8			10.4	1	3
2526.0	2534.0	C	44.6	292	2.3	271	104	19.0	19.3		2.5		-8.8	2	3
2528.0	2536.0	C	42.1	289	2.4	272	105	19.3	20.7	8.9			9.9	1	3
2530.0	2538.0	C	34.0	267	2.4	273	107	19.6	21.8	9.5			4.0	1	3
2532.0	2540.0	C	33.7	274	2.3	274	111	20.2	23.1	9.5			4.6	1	3
2534.0	2542.0	C	36.9	276	2.2	275	114	20.9	23.7		-6.2		-11.1	2	3
2536.0	2544.0	C	37.3	339	2.1	276	117	21.2	23.8	.4			12.5	1	3
2538.0	2546.0	C	39.1	339	2.1	277	120	21.2	24.2	13.2	12.2			2	1
2540.0	2548.0	D	34.5	352	2.0	277	122	21.1	24.6	-1.4			11.4	1	3
2542.0	2550.0	C	46.6	297	2.0	277	124	20.7	24.5	13.3			9.9	1	3
2544.0	2552.0	C	38.8	128	1.9	277	126	20.6	23.6	-7.6	-15.6	-1.2		1	0
2546.0	2554.0	D	45.7	134	1.9	277	128	20.9	23.3	-8.6			-11.5	1	3
2548.0	2556.0	D	48.8	293	1.8	276	130	21.1	22.5	16.3			8.0	1	3
2550.0	2558.0	C	65.4	251	1.7	275	136	20.9	21.8		21.2		-12.6	1	2
2552.0	2560.0	C	47.9	296	1.7	273	143	20.5	20.9	16.3			4.9	1	3
2554.0	2562.0	D	45.6	99	1.7	273	150	19.8	19.7		-12.1		1.3	1	2
2556.0	2564.0	D	51.7	303	1.7	272	154	19.4	19.2	4.2			-17.8	2	4
2558.0	2566.0	C	49.2	291	1.7	273	157	19.2	19.2	16.7			-.5	1	3
2560.0	2568.0	B	33.7	287	1.7	274	159	19.1	19.4		8.4		-1.2	1	2
2562.0	2570.0	A	33.4	286	1.6	272	161	19.2	19.4	10.2	7.5	-11.3		1	0
2564.0	2572.0	B	45.9	292	1.6	272	165	19.2	19.7	-2.3			-14.8	2	4
2566.0	2574.0	B	48.0	288	1.6	269	170	19.4	19.9		10.8		-5.2	1	2
2568.0	2576.0	B	49.1	291	1.5	268	174	19.4	19.9		10.6		-5.5	1	2
2570.0	2578.0	B	48.6	294	1.4	267	176	19.2	19.6		10.4		-5.3	1	2
2572.0	2580.0	B	54.4	294	1.4	268	177	19.4	20.1	-7.1			-19.4	2	4
2574.0	2582.0	C	37.8	286	1.4	267	178	19.7	20.4	-5.5			-10.3	2	4
2576.0	2584.0	B	40.2	297	1.3	262	180	19.9	20.4	-5.0	-16.0	-7.9		2	0
2578.0	2586.0	B	31.6	292	1.3	257	182	19.5	20.1	-3.6	-12.2	-4.0		2	0
2580.0	2588.0	C	22.2	284	1.2	250	184	18.9	20.1		1.2		-3.7	1	2
2582.0	2590.0	B	19.8	283	1.2	252	186	20.0	20.3		.7		-3.5	1	2
2584.0	2592.0	B	27.3	280	1.1	253	185	20.4	20.6	5.0	.6	-11.1		1	0
2586.0	2594.0	B	26.5	282	1.2	255	185	20.8	20.3		1.1		-4.7	1	2
2588.0	2596.0	B	47.2	279	1.2	255	185	19.7	19.7	-10.4			-11.7	2	4
2590.0	2598.0	B	56.1	284	1.2	257	186	19.1	19.7		3.9		-13.2	1	2
2592.0	2600.0	B	52.7	288	1.2	256	187	19.0	19.6	-10.7			-15.5	2	4
2594.0	2602.0	B	52.4	286	1.2	257	187	19.1	19.6		4.0		-11.1	1	2
2596.0	2604.0	B	48.1	291	1.2	251	187	19.0	19.3	-8.2			-13.3	2	4
2598.0	2606.0	B	43.0	293	1.2	253	187	18.9	19.3	11.2	4.7	-17.9		1	0
2600.0	2608.0	B	43.0	299	1.2	249	188	19.0	19.2	-4.9	-17.3	-6.3		2	0
2602.0	2610.0	B	39.4	299	1.2	249	189	18.9	19.4	-4.7	-15.5	-5.1		2	0
2604.0	2612.0	A	39.6	297	1.2	245	189	18.9	19.3	9.9	4.6	-15.7		1	0
2606.0	2614.0	A	42.2	297	1.2	245	190	18.7	19.1	-6.8	-17.0	-5.0		2	0
2608.0	2616.0	B	51.8	300	1.1	249	190	18.6	19.0	-7.8			-15.6	2	4
2610.0	2618.0	B	52.7	300	1.1	249	191	18.5	18.7	-8.1			-15.8	2	4
2612.0	2620.0	B	51.2	299	1.1	250	191	18.4	18.6	-7.9			-14.9	2	4
2614.0	2622.0	C	51.6	298	1.1	247	190	18.3	18.5	-7.9			-14.9	2	4
2616.0	2624.0	C	34.3	44	1.1	247	189	18.8	18.8	1.6			8.6	1	3
2618.0	2626.0	B	45.8	43	1.1	250	188	19.1	19.1	1.7	15.6	10.8		1	0
2620.0	2628.0	B	42.3	48	1.1	248	188	19.3	19.3		10.8		-1.1	2	3
2622.0	2630.0	C	43.6	48	1	250	189	19.2	19.4		11.1		-1.3	2	3

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
2624.0	2632.0	C	39.5	260	1.1	248	191	19.2	19.5	4.8			-10.8	1	3
2626.0	2634.0	B	44.6	281	1.2	249	193	19.5	19.9		-1.1		-10.7	1	2
2628.0	2636.0	B	37.0	290	1.2	248	195	19.9	20.0	8.5	.8	-15.5		1	0
2630.0	2638.0	C	39.8	287	1.2	243	196	20.4	20.1		-17.3		-8.7	2	3
2632.0	2640.0	D	54.7	170	1.2	241	197	20.3	19.9	-19.3			-6.8	1	3
2638.0	2646.0	C	63.9	167	1.1	241	196	20.2	20.0	-8.4	19.8			2	1
2640.0	2648.0	C	55.7	173	1.0	242	196	20.3	20.0	-8.4	11.2			2	1
2642.0	2650.0	C	40.8	160	1.0	245	196	20.1	19.8	-2.2	9.8			2	1
2644.0	2652.0	C	28.9	117	1.0	246	197	19.4	19.5	4.1			6.2	2	4
2646.0	2654.0	B	18.4	106	1.1	245	198	18.8	19.3	3.1			3.1	2	4
2648.0	2656.0	C	58.2	301	1.1	241	199	18.5	19.1	-12.2			-18.6	2	4
2650.0	2658.0	B	55.1	292	1.1	240	199	18.4	19.0	14.3	.8			1	4
2652.0	2660.0	A	39.4	296	1.2	242	201	18.4	18.9	-7.3	-15.9	-1.3		2	0
2654.0	2662.0	B	40.2	299	1.2	246	201	18.4	19.2	-7.3	-16.5			2	1
2656.0	2664.0	B	31.8	239	1.2	247	199	18.5	19.4	-8.2	-8.0	9.2		2	0
2658.0	2666.0	B	33.9	235	1.1	247	196	18.9	19.7		-8.6		.8	2	3
2660.0	2668.0	C	48.9	226	1.2	246	194	19.1	19.9	-16.0	-12.9			2	1
2662.0	2670.0	C	37.0	229	1.2	246	193	19.4	20.1		-12.3		-10.8	1	2
2664.0	2672.0	C	21.9	69	1.2	244	192	19.3	20.0		4.0		5.1	1	2
2666.0	2674.0	B	22.9	73	1.3	241	192	18.7	19.7		3.6		5.2	1	2
2668.0	2676.0	B	11.3	171	1.2	240	193	18.4	19.6		-3.7		-1.3	1	2
2670.0	2678.0	A	29.2	120	1.2	239	196	18.7	20.4	-7.5	-2.8	10.7		1	0
2672.0	2680.0	B	26.9	126	1.1	235	200	19.3	20.9	-7.2	-2.9	10.0		1	0
2674.0	2682.0	B	15.5	82	1.1	233	204	20.1	21.1	-1.0			3.7	1	3
2676.0	2684.0	C	32.9	244	1.1	228	207	20.2	20.7	-1.3	-10.9			1	4
2678.0	2686.0	B	37.1	249	1.1	228	209	20.5	21.0	-12.2	-10.5	12.3		2	0
2680.0	2688.0	B	42.2	259	1.1	229	210	20.0	20.6	1.8	-12.3	-14.6		1	0
2682.0	2690.0	C	39.4	272	1.2	228	210	19.5	19.9	3.5			-11.3	1	3
2684.0	2692.0	B	44.8	261	1.2	229	209	18.8	19.0	1.5	-12.2	-15.1		1	0
2686.0	2694.0	B	45.4	343	1.2	226	208	18.7	18.9		12.8		-.4	1	2
2688.0	2696.0	C	53.9	299	1.1	228	208	18.8	19.0		-.1		-13.3	1	2
2690.0	2698.0	C	35.3	31	1.1	230	207	19.1	19.1		12.9		6.9	1	2
2692.0	2700.0	B	27.8	267	1.2	233	206	19.3	19.4		-5.3		-7.2	1	2
2694.0	2702.0	C	32.2	283	1.2	231	204	19.8	20.0		-12.6		-4.8	2	3
2696.0	2704.0	B	47.4	262	1.2	235	203	20.2	20.3	3.9			-15.7	1	3
2698.0	2706.0	C	53.5	258	1.2	235	203	20.0	20.3	3.6			-19.8	1	3
2700.0	2708.0	C	46.3	262	1.2	237	203	19.6	19.5	3.6	-11.0			1	4
2702.0	2710.0	C	54.1	256	1.2	242	201	19.0	18.9	3.1	-16.0			1	4
2704.0	2712.0	C	50.9	186	1.3	244	197	18.9	18.9	-9.8			13.7	2	4
2706.0	2714.0	C	54.3	270	1.3	245	192	19.5	18.7	-16.3			-10.3	2	4
2708.0	2716.0	D	54.6	268	1.3	244	190	20.0	18.6	-16.5			-10.3	2	4
2710.0	2718.0	D	55.5	272	1.2	243	191	20.4	18.7	-16.3			-11.6	2	4
2712.0	2720.0	C	45.7	288	1.2	245	191	20.7	19.4		2.4		-9.0	1	2
2714.0	2722.0	C	58.8	291	1.2	248	192	21.0	20.2	-14.5			-19.7	2	4
2716.0	2724.0	C	35.0	222	1.1	247	193	21.0	20.6	-10.3			3.0	2	4
2718.0	2726.0	B	27.0	229	1.1	248	196	20.8	20.5	-7.6			1.5	2	4
2720.0	2728.0	B	33.7	219	1.1	246	198	20.6	20.5	-9.2			4.0	2	4
2722.0	2730.0	A	34.4	267	1.1	242	201	20.7	20.6	-10.3	-13.3	6.1		2	0
2724.0	2732.0	B	31.9	269	1.1	238	206	20.8	20.7	-9.0	-11.8	6.3		2	0
2726.0	2734.0	B	30.9	277	1.1	230	213	20.6	21.3	-8.9	-11.6	5.9		2	0
2728.0	2736.0	B	30.6	273	1.2	226	219	21.3	21.7	-9.2			-1.4	2	4
2730.0	2738.0	C	52.3	303	1.2	224	225	21.3	21.8		-6.1		-17.0	1	2
2732.0	2740.0	B	43.1	279	1.2	222	228	21.3	21.4	-14.4			-1.2	2	4
2734.0	2742.0	C	44.5	285	1.2	221	232	20.9	21.3	-14.9			-1.8	2	4
2736.0	2744.0	C	51.7	284	1.2	222	236	21.4	21.3	.7			-19.5	1	3

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
2738.0	2746.0	C	47.5	286	1.2	224	240	22.0	21.8	.1			-17.3	1	3
2740.0	2748.0	B	19.3	96	1.2	223	243	21.8	21.0	.9			5.1	1	3
2742.0	2750.0	B	19.2	77	1.3	217	246	20.9	20.5		6.7		4.1	1	2
2744.0	2752.0	B	31.2	301	1.4	216	251	20.2	20.0	1.3	-8.3	-8.9		1	0
2746.0	2754.0	C	52.4	305	1.5	215	258	20.1	20.4	.4	-18.2			1	4
2748.0	2756.0	B	61.3	277	1.6	215	266	20.2	20.7		-6.9		15.3	2	3
2750.0	2758.0	B	59.2	280	1.7	216	271	20.2	20.8		-4.8		15.0	2	3
2752.0	2760.0	B	57.7	284	1.7	219	277	20.7	21.3	-15.1			-18.5	1	3
2754.0	2762.0	B	59.4	293	1.8	222	286	21.0	21.9	-16.1			-20.1	1	3
2756.0	2764.0	C	28.2	242	1.8	223	296	21.1	21.9	1.6	10.2			2	1
2758.0	2766.0	C	49.0	265	2.0	224	305	20.7	21.2		-18.9		-.9	1	2
2760.0	2768.0	C	52.3	260	2.1	226	312	20.6	21.0		-17.2		3.0	1	2
2762.0	2770.0	B	32.7	270	2.2	230	319	20.8	20.8	1.5	11.0	9.1		2	0
2764.0	2772.0	B	23.7	244	2.3	233	324	20.3	19.7	3.9	9.5			2	1
2766.0	2774.0	B	2.2	247	2.3	232	326	19.7	19.2	-.8			.7	1	3
2768.0	2776.0	B	42.6	273	2.4	231	326	19.5	19.6	2.3			13.4	2	4
2770.0	2778.0	A	45.5	278	2.4	229	325	20.1	20.5	.2	16.5	14.3		2	0
2772.0	2780.0	A	33.6	283	2.3	229	324	20.3	20.7	.1	10.2	10.1		2	0
2774.0	2782.0	B	35.3	295	2.3	230	325	20.6	21.0	-11.3	-12.6	8.5		1	0
2776.0	2784.0	D	43.2	290	2.4	232	330	21.0	21.4	-.6			14.7	2	4
2778.0	2786.0	C	23.8	318	2.4	236	337	21.6	22.1		-8.9		-2.4	1	2
2780.0	2788.0	B	46.5	311	2.4	238	344	21.3	21.1		-18.8		-2.8	1	2
2782.0	2790.0	B	57.8	299	2.5	241	352	19.7	19.6		-19.3		3.6	1	2
2784.0	2792.0	B	45.4	293	2.6	242	358	18.9	18.8		-7.7		5.5	1	2
2786.0	2794.0	B	44.7	295	2.6	242	0	18.6	18.6		-7.5		5.2	1	2
2788.0	2796.0	B	51.2	290	2.6	241	359	18.5	18.5	7.8			15.5	2	4
2790.0	2798.0	C	51.5	282	2.6	242	358	18.5	18.4	9.5			14.8	2	4
2792.0	2800.0	C	56.6	181	2.5	241	357	18.5	18.5	15.8	2.3			2	1
2794.0	2802.0	C	60.0	172	2.5	240	357	18.6	18.6	16.2	-2.2			2	1
2796.0	2804.0	C	40.4	216	2.5	240	355	18.7	18.6	12.2			-.7	2	4
2798.0	2806.0	D	42.7	174	2.6	241	354	18.8	18.8	9.3	.7			2	1
2800.0	2808.0	C	65.7	277	2.6	241	352	19.1	19.1		-11.5		17.0	1	2
2802.0	2810.0	C	42.9	214	2.6	241	351	19.5	19.6		14.1		14.0	1	2
2804.0	2812.0	C	6.0	264	2.5	240	349	20.0	20.8	-1.7	.1	3.0		1	0
2816.0	2824.0	C	49.5	292	2.5	241	345	19.0	19.8	3.2			16.8	2	4
2818.0	2826.0	C	67.6	276	2.5	241	344	18.7	20.0		-18.3		16.0	1	2
2820.0	2828.0	D	51.0	305	2.5	241	342	18.5	20.0		-18.4		-1.1	1	2
2822.0	2830.0	D	51.2	300	2.5	239	337	18.4	19.8		-18.5		-1.1	1	2
2824.0	2832.0	D	23.5	154	2.5	238	333	19.2	20.2	4.8	1.1			2	1
2826.0	2834.0	C	42.8	266	2.5	238	330	20.3	21.4	5.0	19.3	8.6		2	0
2828.0	2836.0	B	41.7	267	2.4	239	331	20.9	22.2	4.8	19.4	8.5		2	0
2830.0	2838.0	A	42.0	272	2.4	241	334	20.5	22.3	4.7	19.3	8.7		2	0
2832.0	2840.0	B	34.1	274	2.5	242	341	20.0	21.4		-5.2		4.7	1	2
2834.0	2842.0	B	44.3	300	2.6	243	347	19.8	21.5	-14.4	-13.4	16.6		1	0
2836.0	2844.0	B	47.9	300	2.6	243	351	19.6	20.7		-13.8		2.7	1	2
2838.0	2846.0	C	45.8	305	2.5	242	355	19.5	20.2	2.3			15.0	2	4
2840.0	2848.0	B	46.6	303	2.6	244	360	19.6	21.0	5.0	19.8	11.4		2	0
2842.0	2850.0	B	44.8	301	2.7	245	4	19.6	21.6	5.1	20.4	8.8		2	0
2844.0	2852.0	B	38.6	293	2.8	246	8	19.4	20.7	7.7	17.2	3.7		2	0
2846.0	2854.0	B	38.3	290	2.8	246	8	19.3	20.6	7.9	17.3	2.6		2	0
2848.0	2856.0	B	41.1	289	2.8	246	12	19.1	19.9	8.0	18.6	1.6		2	0
2850.0	2858.0	B	42.6	284	2.8	247	14	19.1	19.5	10.1			9.3	2	4
2852.0	2860.0	C	39.0	290	2.8	248	15	19.3	20.0	8.3			9.0	2	4
2854.0	2862.0	B	39.1	281	2.8	248	16	19.1	19.9	9.7			7.7	2	4
2856.0	2864.0	B	48.9	294	2.8	249	16	18.9	19.7	10.[illegible]			13.3	2	4

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
2858.0	2866.0	B	51.2	295	2.8	248	16	18.6	19.4	11.2			14.6	2	4
2860.0	2868.0	B	49.0	294	2.8	247	16	18.2	18.7	10.4			12.6	2	4
2862.0	2870.0	B	35.0	301	2.8	247	17	18.1	18.6		-2.6		5.5	1	2
2864.0	2872.0	C	36.2	349	2.8	246	17	18.1	18.6	-1.9	7.2			2	1
2866.0	2874.0	D	34.4	37	2.8	247	17	18.2	18.6	-7.2			3.7	2	4
2868.0	2876.0	D	19.1	8	2.8	247	17	18.3	18.7	-2.0			3.6	2	4
2870.0	2878.0	C	60.4	140	2.8	247	17	18.4	18.8		17.8		-4.2	1	2
2872.0	2880.0	C	38.7	186	2.7	247	17	18.5	18.9		15.4		6.5	1	2
2874.0	2882.0	C	34.0	193	2.7	246	17	18.6	19.0	6.8			6.6	1	3
2876.0	2884.0	C	30.9	223	2.7	247	18	18.7	19.2	8.4	5.7			2	1
2878.0	2886.0	C	33.7	304	2.7	247	18	19.0	19.4	-8.1	-2.9			1	4
2880.0	2888.0	C	51.6	24	2.7	247	18	19.2	19.6	-10.4			-12.1	1	3
2882.0	2890.0	C	51.3	278	2.8	248	19	19.5	19.8	15.9			10.5	2	4
2884.0	2892.0	B	41.3	273	2.8	247	19	19.6	19.9	12.4	18.3	-5.4		2	0
2886.0	2894.0	B	41.9	274	2.8	248	20	19.7	20.0	12.5	18.8	-5.5		2	0
2888.0	2896.0	C	40.3	270	2.8	248	21	19.7	20.1	12.1	17.3			2	1
2890.0	2898.0	C	38.3	264	2.8	248	21	19.8	20.1	11.8			3.6	2	4
2892.0	2900.0	C	38.1	265	2.8	248	22	19.9	20.2	-3.7	8.0			1	4
2894.0	2902.0	C	37.2	269	2.8	249	24	19.9	20.3	11.2			4.1	2	4
2896.0	2904.0	C	42.9	268	2.8	250	25	20.0	20.3	13.9			4.4	2	4
2898.0	2906.0	D	43.5	280	2.8	250	27	19.9	20.3	13.2			6.9	2	4
2900.0	2908.0	C	42.6	284	2.8	250	29	19.9	20.3	-6.9	5.7			1	4
2902.0	2910.0	C	39.0	288	2.9	251	30	19.8	20.3		17.3		6.5	2	3
2904.0	2912.0	C	37.9	288	2.9	253	32	19.8	20.3		16.5		5.9	2	3
2906.0	2914.0	C	12.4	270	2.9	253	34	19.8	20.2		3.2		3.8	1	2
2908.0	2916.0	D	27.1	71	2.9	254	36	19.8	20.2		-7.3		-6.3	1	2
2910.0	2918.0	C	39.1	136	2.8	254	37	19.8	20.2		3.4		-5.9	1	2
2912.0	2920.0	C	54.6	11	2.9	254	36	19.8	20.2	-5.9			18.1	2	4
2914.0	2922.0	C	57.8	315	2.9	254	36	19.9	20.2	14.7			18.9	2	4
2916.0	2924.0	C	23.3	6	2.9	254	36	19.9	20.3	-.8			5.8	2	4
2918.0	2926.0	D	47.0	281	2.9	254	36	19.9	20.3	15.9			5.6	2	4
2920.0	2928.0	C	49.3	279	2.9	255	37	20.2	20.9	-5.6			17.9	1	3
2922.0	2930.0	C	46.7	333	2.9	255	38	20.6	22.0	6.9			15.3	2	4
2924.0	2932.0	B	52.2	309	2.9	254	39	21.0	23.1	-15.4			16.2	1	3
2926.0	2934.0	B	59.3	326	2.8	253	40	21.3	23.5		-9.4		15.2	1	2
2928.0	2936.0	B	59.7	326	2.8	253	41	21.3	23.4		-9.1		15.6	1	2
2930.0	2938.0	C	53.0	332	2.7	253	42	20.8	22.3	-18.7	-8.6			1	4
2932.0	2940.0	C	58.0	318	2.8	255	45	20.4	21.2	17.4			18.2	2	4
2934.0	2942.0	B	60.0	320	2.9	256	48	20.0	20.6	18.8			18.7	2	4
2936.0	2944.0	B	58.0	306	2.9	256	52	19.3	19.9	-11.5	9.9			1	4
2938.0	2946.0	B	58.5	301	3.0	256	55	19.1	19.6	-8.2	14.9			1	4
2940.0	2948.0	B	55.6	303	3.0	255	58	18.9	19.4	-7.2	13.1			1	4
2942.0	2950.0	D	49.0	67	3.0	254	60	18.9	19.5	-8.5			-10.9	1	3
2948.0	2956.0	B	59.4	307	3.0	258	64	19.9	19.9	-7.5	17.3			1	4
2950.0	2958.0	C	59.0	307	3.0	261	66	20.1	19.9	-6.6	18.0			1	4
2952.0	2960.0	B	58.3	311	3.0	263	69	20.1	19.9	-6.4	17.5			1	4
2954.0	2962.0	B	58.5	315	3.0	264	73	20.0	19.8	-6.4	17.4			1	4
2956.0	2964.0	C	52.5	311	3.0	265	77	20.0	19.9	19.6			2.5	2	4
2958.0	2966.0	C	51.8	291	2.9	265	80	20.1	20.0	19.2	14.2			2	1
2960.0	2968.0	D	52.1	291	2.9	265	81	20.3	20.1	19.4			-5.9	2	4
2964.0	2972.0	B	53.0	297	2.8	265	83	21.4	21.0		16.6		-4.7	2	3
2966.0	2974.0	B	58.2	296	2.8	264	82	21.6	21.6		21.3		-5.3	2	3
2968.0	2976.0	C	54.5	293	2.8	264	79	21.6	21.8		17.9		-5.1	2	3
2972.0	2980.0	C	46.2	296	2.9	263	77	20.8	21.5		15.2		-1.7	2	3
2974.0	2982.0	C	51.8	303	2.9	265	77	21.4	21.7	-.1			21.1	1	3

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
2976.0	2984.0	B	49.4	304	2.9	265	79	22.2	22.6	.3			20.0	1	3
2978.0	2986.0	B	48.3	303	2.8	267	80	22.8	23.3	.9			19.7	1	3
2980.0	2988.0	B	46.6	305	2.8	267	82	23.1	23.7	1.0			18.9	1	3
2982.0	2990.0	C	47.9	306	2.8	266	84	22.8	23.5	1.0			19.4	1	3
2984.0	2992.0	C	59.0	271	2.8	265	86	22.2	23.0		3.6		-18.8	2	3
2986.0	2994.0	D	42.3	82	2.8	265	88	21.8	22.5	-9.9			-8.0	1	3
2988.0	2996.0	C	18.2	31	2.8	268	91	21.3	21.8	1.8	6.0			2	1
2990.0	2998.0	B	57.2	84	2.7	269	94	20.8	21.5		5.2		16.9	2	3
2992.0	3000.0	B	16.4	325	2.7	269	98	20.3	21.1	4.9	4.4	-5.0		2	0
2994.0	3002.0	C	69.8	36	2.7	269	102	20.0	21.0		-19.7		14.3	1	2
2996.0	3004.0	C	68.5	96	2.7	267	106	19.9	20.9	-17.8	8.0			2	1
2998.0	3006.0	C	57.1	117	2.7	267	110	19.8	20.8	-16.0	-4.2			2	1
3000.0	3008.0	C	61.4	281	2.7	270	113	19.8	20.7	15.2	-9.2			2	1
3002.0	3010.0	C	48.1	275	2.6	273	118	19.8	20.7	6.2	-9.8			2	1
3006.0	3014.0	B	42.6	291	2.4	274	127	19.7	20.5		18.8		6.3	1	2
3008.0	3016.0	C	40.7	285	2.3	272	133	19.6	20.3	3.5	-9.0			2	1
3010.0	3018.0	C	53.9	292	2.3	271	138	19.3	20.2	19.5			6.2	1	3
3012.0	3020.0	C	48.8	300	2.2	269	142	19.2	20.1	15.5			6.1	1	3
3014.0	3022.0	B	64.8	156	2.2	267	145	19.1	20.1		-8.6		14.9	2	3
3016.0	3024.0	C	57.1	313	2.1	265	145	19.1	20.1	11.2	-7.8			2	1
3018.0	3026.0	C	37.1	285	2.1	263	146	19.1	20.0	.3	-10.8			2	1
3020.0	3028.0	C	23.6	99	2.1	261	146	19.1	19.8		-5.3		.1	1	2
3022.0	3030.0	D	20.0	95	2.1	259	147	19.1	19.7	.5			4.4	2	4
3024.0	3032.0	C	53.4	234	2.1	258	148	19.1	19.7		-1.6		-15.0	1	2
3026.0	3034.0	D	21.2	217	2.2	257	149	19.2	19.7		-2.6		-5.2	1	2
3028.0	3036.0	C	13.2	195	2.2	257	150	19.2	19.7	-3.5			-.5	2	4
3030.0	3038.0	C	43.5	196	2.2	256	150	19.2	19.8	-13.6			-1.0	2	4
3032.0	3040.0	C	27.5	193	2.2	255	150	19.2	19.9	-7.5			-.4	2	4
3034.0	3042.0	D	28.5	5	2.2	255	151	19.4	20.0		8.8		7.0	1	2
3036.0	3044.0	D	54.4	100	2.2	255	151	19.5	20.2	-18.2			1.9	1	3
3040.0	3048.0	B	41.6	289	2.2	256	150	19.9	20.9	13.7			.4	1	3
3042.0	3050.0	B	40.6	320	2.2	256	149	20.3	21.3	10.7	17.7			1	4
3044.0	3052.0	B	18.3	53	2.1	256	150	20.8	21.8	3.6			2.6	2	4
3046.0	3054.0	B	6.9	326	2.1	256	151	21.8	21.7	.9			-1.9	2	4
3048.0	3056.0	B	46.1	297	2.0	257	153	22.1	21.1	2.7			-16.7	2	4
3050.0	3058.0	C	48.4	288	2.0	257	154	22.0	20.4	17.9			.1	1	3
3052.0	3060.0	B	48.9	285	2.0	255	155	21.2	20.0	-1.9	-18.8	-16.4		2	0
3054.0	3062.0	C	50.3	288	2.0	254	156	20.8	20.8		17.4		-1.4	1	2
3056.0	3064.0	D	53.0	287	1.9	251	157	21.0	22.0	-2.8			-21.3	2	4
3062.0	3070.0	C	63.4	270	1.9	254	162	21.6	22.2		14.1		-16.0	1	2
3064.0	3072.0	B	53.8	285	2.0	255	165	21.8	22.2	-6.4			-21.8	2	4
3066.0	3074.0	C	52.9	286	1.9	255	168	21.7	22.4	-7.0			-21.0	2	4
3068.0	3076.0	C	31.0	293	1.9	253	172	21.7	22.5		6.7		-2.9	1	2
3070.0	3078.0	C	55.6	277	1.9	252	175	21.8	22.0	-13.4			-20.2	2	4
3072.0	3080.0	C	55.8	277	1.9	250	176	22.3	21.5	-13.4			-19.7	2	4
3074.0	3082.0	C	56.1	316	1.9	249	176	22.0	20.9	2.4	-20.8			2	1
3076.0	3084.0	C	34.7	330	1.8	247	176	21.4	20.7		13.2		3.1	1	2
3078.0	3086.0	B	24.6	334	1.9	246	177	20.0	20.3		8.2		1.9	1	2
3080.0	3088.0	B	57.1	282	2.0	247	180	19.4	20.0		6.0		-13.2	1	2
3082.0	3090.0	B	61.3	280	2.1	249	181	19.2	19.8		5.9		-16.3	1	2
3084.0	3092.0	B	49.1	291	2.1	250	181	19.1	19.7	-7.8			-15.1	2	4
3086.0	3094.0	B	51.1	293	2.1	250	182	19.1	19.7	-7.9			-16.4	2	4
3088.0	3096.0	C	55.2	293	2.0	249	182	19.1	19.7	-9.1			-19.1	2	4
3090.0	3098.0	C	63.8	293	2.0	246	182	19.1	19.7		14.4		-12.8	1	2
3092.0	3100.0	C	63.6	294	2.0	245	182	19.1	19.8		14.2		-12.7	1	2

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
3094.0	3102.0	C	61.1	283	2.0	242	183	19.2	19.8		6.0		-15.8	1	2
3096.0	3104.0	C	59.4	281	2.0	242	184	19.5	19.8		4.0		-15.7	1	2
3098.0	3106.0	C	44.3	79	2.0	243	185	19.9	20.0		4.9		11.3	1	2
3100.0	3108.0	C	69.2	201	2.0	243	186	20.0	20.1		-15.8		19.6	2	3
3102.0	3110.0	C	63.6	190	2.0	244	186	19.9	20.2		-3.9		19.1	2	3
3106.0	3114.0	D	59.1	90	1.9	242	185	19.6	19.7		2.3		16.6	1	2
3108.0	3116.0	C	51.5	90	2.0	241	185	19.3	19.7		1.7		12.4	1	2
3110.0	3118.0	C	62.5	280	2.0	239	185	19.2	19.7		2.5		-18.8	1	2
3112.0	3120.0	D	60.9	281	2.0	241	186	19.1	19.7		3.3		-17.1	1	2
3114.0	3122.0	D	62.0	280	2.0	244	186	19.1	19.6		2.5		-18.5	1	2
3116.0	3124.0	D	56.4	264	2.0	246	186	19.1	19.6		-6.4		-18.7	1	2
3118.0	3126.0	D	44.9	108	2.0	245	185	19.2	19.7		-4.5		6.8	1	2
3120.0	3128.0	D	55.9	292	2.0	245	184	19.2	19.7	-10.4			-18.9	2	4
3122.0	3130.0	C	54.6	282	2.0	245	184	19.1	19.6	16.4	3.7			1	4
3124.0	3132.0	C	53.4	280	2.1	247	184	19.0	19.5	-12.7			-15.2	2	4
3126.0	3134.0	C	53.1	278	2.1	247	183	19.1	19.5	-12.7			-14.9	2	4
3128.0	3136.0	B	53.3	277	2.0	245	182	19.2	19.4	-12.7			-14.9	2	4
3130.0	3138.0	C	53.9	277	2.0	244	181	19.4	19.6	-13.1			-15.5	2	4
3132.0	3140.0	D	69.7	165	2.0	243	181	19.6	20.3	-18.4	15.5			2	1
3134.0	3142.0	B	31.9	272	2.0	245	182	19.9	20.5		-.4		-7.1	1	2
3136.0	3144.0	B	36.8	271	2.0	244	182	20.3	21.3	8.5	-.7	-17.0		1	0
3138.0	3146.0	C	27.8	278	1.9	243	182	20.5	20.9		.8		-5.4	1	2
3140.0	3148.0	C	31.9	280	1.9	243	182	20.8	21.4		1.6		-6.2	1	2
3142.0	3150.0	C	22.8	248	1.8	242	183	20.7	21.3	-6.5			-2.4	2	4
3144.0	3152.0	C	37.7	161	1.8	245	185	20.7	21.5	-4.3			10.6	2	4
3146.0	3154.0	C	22.2	284	1.9	241	189	21.0	21.9	-4.6			-4.9	2	4
3148.0	3156.0	C	63.4	273	1.9	239	193	21.0	21.9	18.9	-8.4			1	4
3150.0	3158.0	C	65.9	276	1.9	237	197	21.1	21.9	19.0	-9.0			1	4
3152.0	3160.0	C	64.6	280	1.8	235	201	20.2	21.2	18.8	-8.9			1	4
3154.0	3162.0	D	58.3	300	1.8	235	204	19.6	20.2	-15.3			-18.3	2	4
3156.0	3164.0	C	47.3	272	1.8	232	206	19.0	19.5	-14.7			-5.3	2	4
3158.0	3166.0	B	45.8	275	1.9	231	208	19.0	19.3	-13.7			-5.3	2	4
3160.0	3168.0	B	44.2	276	1.9	233	209	19.1	19.5	-13.1			-5.2	2	4
3162.0	3170.0	C	48.6	273	2.0	231	208	19.3	19.6	-15.7			-5.5	2	4
3164.0	3172.0	C	34.6	278	2.1	232	208	19.4	19.6	-9.3			-4.1	2	4
3166.0	3174.0	C	35.0	277	2.1	232	206	19.6	19.5	-9.3			-4.1	2	4
3168.0	3176.0	D	39.3	290	2.0	234	204	20.2	19.8	-9.4			-7.4	2	4
3170.0	3178.0	C	47.3	294	2.0	236	202	21.2	20.7		.1		-11.6	1	2
3172.0	3180.0	B	18.5	306	1.9	235	200	21.8	21.4	-2.9			-4.4	2	4
3174.0	3182.0	B	16.5	303	1.8	236	200	21.4	21.4	-2.9			-3.7	2	4
3176.0	3184.0	B	57.1	281	1.8	236	202	20.5	20.7	-19.8			-13.2	2	4
3178.0	3186.0	C	57.4	289	1.8	234	204	19.8	20.1	14.7			-17.9	1	3
3180.0	3188.0	B	57.2	291	1.8	235	205	19.5	20.1	14.8	-2.8			1	4
3182.0	3190.0	C	59.1	289	1.8	235	205	19.5	20.1		-4.0		-19.4	1	2
3184.0	3192.0	D	51.5	8	1.8	235	205	19.4	20.1		-7.6		-14.9	2	3
3186.0	3194.0	D	35.1	31	1.8	236	205	19.5	20.2		12.8		6.9	1	2
3188.0	3196.0	D	50.7	356	1.8	236	205	19.4	20.4	3.8	-12.1			2	1
3190.0	3198.0	C	52.5	286	1.8	236	205	19.4	20.2		-4.6		-15.9	1	2
3192.0	3200.0	C	62.9	290	1.8	236	204	19.3	20.1	18.7	-3.5			1	4
3194.0	3202.0	B	62.2	289	1.9	235	204	19.1	19.8	17.8	-3.8			1	4
3196.0	3204.0	B	62.1	289	2.0	236	204	19.2	19.9	17.8	-3.9			1	4
3198.0	3206.0	B	61.4	289	2.0	236	205	19.2	20.0	17.1	-4.1			1	4
3200.0	3208.0	C	70.9	41	2.0	236	205	19.2	20.1		13.7		-17.3	2	3
3202.0	3210.0	C	62.5	280	1.9	235	206	19.2	20.1	14.2	-10.7			1	4
3204.0	3212.0	C	62.0	281	1.8	234	206	19.2	20.1	14.3	-10.0			1	4

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
3206.0	3214.0	D	56.1	294	1.8	233	207	19.2	20.1	-16.4			-14.5	2	4
3208.0	3216.0	D	57.4	288	1.8	233	207	19.3	20.1	-18.8			-13.5	2	4
3210.0	3218.0	D	56.3	290	1.8	233	207	19.3	20.1	-17.7			-13.4	2	4
3212.0	3220.0	C	43.0	266	1.8	232	207	19.5	20.1		-10.1		-13.4	1	2
3214.0	3222.0	C	54.8	101	1.8	231	207	19.7	20.0		6.8		16.6	1	2
3216.0	3224.0	C	68.8	134	1.7	231	207	20.5	20.4		-15.5		17.0	1	2
3218.0	3226.0	C	50.2	315	1.6	231	207	20.9	21.1	15.7	6.9			1	4
3220.0	3228.0	B	30.7	204	1.6	231	208	20.6	21.1	-6.2			6.7	2	4
3222.0	3230.0	C	54.8	299	1.7	233	207	19.9	20.8	-14.8			-15.5	2	4
3224.0	3232.0	B	57.0	276	1.7	233	207	19.2	19.9	9.3	-11.4			1	4
3226.0	3234.0	B	56.8	276	1.7	233	207	19.2	19.6	9.1	-11.1			1	4
3228.0	3236.0	C	59.8	270	1.8	230	207	19.4	20.8	8.9	-15.9			1	4
3230.0	3238.0	C	8.4	256	1.6	232	204	20.2	22.6		-2.4		-2.6	1	2
3232.0	3240.0	B	48.8	170	1.4	236	203	20.6	24.7		-20.5		-2.7	1	2
3234.0	3242.0	C	66.8	268	1.4	239	201	21.0	24.8	17.6	-21.0			1	4
3240.0	3248.0	B	54.8	261	1.7	237	205	19.4	20.1	4.2	-16.5			1	4
3242.0	3250.0	D	46.8	53	1.6	240	205	19.1	20.0	13.2			-3.7	2	4
3244.0	3252.0	B	54.4	257	1.7	240	204	19.2	20.0	3.4	-17.1			1	4
3246.0	3254.0	C	54.9	255	1.7	238	203	19.3	20.1	3.0	-18.0			1	4
3248.0	3256.0	D	29.6	274	1.7	236	202	19.5	20.3	-7.7	-11.4			2	1
3250.0	3258.0	D	40.5	316	1.6	239	202	19.6	20.7		6.3		-5.1	1	2
3252.0	3260.0	C	50.1	322	1.6	243	202	19.6	20.7		11.2		-5.4	1	2
3254.0	3262.0	C	20.8	281	1.7	242	202	19.6	20.7		-1.9		-5.1	1	2
3256.0	3264.0	D	36.9	298	2.0	240	201	19.5	20.2	8.5			-7.3	1	3
3258.0	3266.0	C	39.8	335	2.2	239	199	19.2	20.1	-.6			-11.5	2	4
3260.0	3268.0	D	66.1	307	2.2	239	198	19.0	19.9		13.5		-15.6	1	2
3262.0	3270.0	B	60.9	306	2.0	242	198	18.9	19.7		10.3		-12.4	1	2
3264.0	3272.0	C	35.9	30	1.9	245	197	18.8	19.5		12.6		7.6	1	2
3266.0	3274.0	D	56.1	72	1.8	245	197	18.7	19.2	18.4			3.3	2	4
3268.0	3276.0	D	55.3	56	1.8	243	197	18.7	18.9	17.9			-2.1	2	4
3270.0	3278.0	D	50.9	143	1.8	241	198	18.8	18.8	2.4			16.0	2	4
3272.0	3280.0	C	34.9	307	1.8	241	198	19.1	19.4		3.9		-4.7	1	2
3274.0	3282.0	C	37.2	328	1.8	242	199	19.2	20.6		-12.5		-10.7	2	3
3276.0	3284.0	B	63.8	298	1.8	244	200	19.3	21.0		4.7		-19.9	1	2
3278.0	3286.0	C	48.5	264	1.8	244	202	19.1	20.9	-16.5			-5.6	2	4
3280.0	3288.0	C	65.6	302	1.8	242	203	19.2	20.1		6.5		-19.6	1	2
3282.0	3290.0	C	59.5	289	1.7	240	202	19.3	20.0		-2.5		-18.9	1	2
3284.0	3292.0	C	58.1	115	1.7	236	200	19.3	19.6		-2.8		13.7	1	2
3286.0	3294.0	C	60.3	285	1.7	236	199	19.7	19.7	16.3	-3.4			1	4
3288.0	3296.0	C	57.9	285	1.6	238	199	19.7	20.6	-18.5			-15.7	2	4
3290.0	3298.0	C	58.0	285	1.5	242	200	20.1	21.1	-19.1			-16.0	2	4
3296.0	3304.0	C	65.9	127	1.6	243	203	20.4	21.5		-11.2		16.8	1	2
3318.0	3326.0	C	41.7	39	1.9	241	211	18.7	19.7		2.0		-6.8	2	3
3320.0	3328.0	D	38.0	34	1.9	241	209	18.8	19.8		1.1		-6.4	2	3
3322.0	3330.0	D	67.5	21	1.8	240	208	18.9	19.9	18.4	-5.4			2	1
3324.0	3332.0	D	55.8	0	1.7	238	207	18.9	20.0	5.4	-13.1			2	1
3326.0	3334.0	D	56.1	1	1.6	238	207	19.0	20.2	5.7	-13.2			2	1
3328.0	3336.0	C	56.3	141	1.6	237	208	19.1	20.3		-11.6		8.1	1	2
3330.0	3338.0	C	67.2	141	1.7	236	208	19.1	20.4		-18.1		13.0	1	2
3332.0	3340.0	C	51.2	336	1.7	232	209	19.0	20.5	17.0			-3.4	1	3
3334.0	3342.0	C	50.4	48	1.7	231	209	19.1	20.6		7.5		-6.6	2	3
3336.0	3344.0	D	48.5	47	1.6	230	209	19.2	20.2	13.0			-6.5	2	4
3340.0	3348.0	D	51.6	26	1.6	228	209	19.7	19.2	11.2			-12.3	2	4
3342.0	3350.0	D	51.5	22	1.5	227	208	20.3	19.2	10.6			-13.4	2	4
3344.0	3352.0	D	53.2	20	1.5	228	208	20.8	20.1	11.[illegible]			-14.8	2	4

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
3346.0	3354.0	C	61.0	303	1.5	229	208	21.2	21.2	20.9	3.1		1	4
3348.0	3356.0	C	19.0	322	1.4	228	208	21.6	21.5	-2.2		-4.7	2	4
3350.0	3358.0	B	69.5	285	1.3	229	208	21.6	20.9	21.1	-14.3		1	4
3368.0	3376.0	C	61.8	292	1.4	231	200	22.3	23.6		.7	-22.2	1	2
3380.0	3388.0	C	46.8	243	1.5	227	208	20.5	21.5		-18.8	-16.2	1	2
3384.0	3392.0	D	44.3	353	1.9	234	211	19.6	19.4	12.9	14.4		1	4
3390.0	3398.0	C	67.5	303	1.8	233	200	20.0	20.7		10.8	-19.8	1	2
3392.0	3400.0	C	67.7	273	1.8	235	200	20.0	20.9	18.3	-15.7		1	4
3394.0	3402.0	B	53.2	251	1.8	236	203	19.6	20.5	1.5	-18.7		1	4
3396.0	3404.0	B	69.9	278	1.8	236	206	19.3	20.2	19.0	-18.2		1	4
3398.0	3406.0	C	70.7	138	1.6	236	208	18.9	20.2		-18.9	17.3	1	2
3400.0	3408.0	C	63.9	26	1.5	236	209	18.6	20.3	19.1		16.8	1	3
3402.0	3410.0	C	62.5	24	1.7	236	210	18.6	20.4		-4.1	-18.9	2	3
3410.0	3418.0	C	33.4	176	1.5	233	211	18.9	21.4	-1.4		9.4	2	4
3412.0	3420.0	C	37.3	181	1.5	233	211	19.2	21.6	-2.6		10.7	2	4
3414.0	3422.0	C	44.7	158	1.5	232	210	19.4	21.6	-13.6	-12.4	16.8	1	0
3416.0	3424.0	D	31.9	304	1.4	230	210	19.6	21.7		-13.7	-7.0	2	3
3418.0	3426.0	C	53.5	262	1.4	225	209	19.8	21.6	-20.5		-3.3	2	4
3420.0	3428.0	C	53.6	261	1.3	221	208	19.9	21.6	-20.6		-3.2	2	4
3422.0	3430.0	C	33.0	236	1.3	217	208	20.2	21.6		-12.1	-9.5	1	2
3424.0	3432.0	B	27.9	193	1.3	215	207	20.9	21.6		-11.3	-4.3	1	2
3426.0	3434.0	C	28.7	177	1.2	212	207	21.8	21.6		-10.9	-2.4	1	2
3428.0	3436.0	C	22.5	29	1.2	211	207	22.4	21.6		8.7	4.5	1	2
3430.0	3438.0	B	22.8	276	1.2	211	206	22.2	21.8		-3.6	-6.2	1	2
3432.0	3440.0	C	54.3	40	1.1	213	205	21.8	21.9	17.8		-10.2	2	4
3434.0	3442.0	C	51.5	48	1.0	217	204	21.5	21.9	17.4		-6.2	2	4
3436.0	3444.0	B	57.4	62	1.0	222	203	21.8	22.2		21.3	-2.0	2	3
3438.0	3446.0	B	16.0	340	.9	226	201	22.0	22.3	4.4	4.5		1	4
3440.0	3448.0	B	15.8	80	.9	228	200	22.3	23.0	4.2		1.3	2	4
3442.0	3450.0	B	22.3	287	.8	226	198	22.7	23.6	-5.2		-4.7	2	4
3444.0	3452.0	B	24.6	233	.8	225	197	23.1	23.9	-1.1	-8.9		1	4
3446.0	3454.0	C	51.4	38	.8	227	196	23.6	23.9	18.7		-7.9	2	4
3448.0	3456.0	C	49.9	57	.9	237	193	23.2	23.2	18.8		-.4	2	4
3450.0	3458.0	C	35.2	305	1.0	250	190	22.4	23.1	-4.4		-10.8	2	4
3452.0	3460.0	C	60.3	107	1.2	261	188	20.8	22.6	-21.4		16.1	1	3
3454.0	3462.0	D	72.1	25	1.5	265	188	19.1	22.6		18.6	-17.8	2	3
3456.0	3464.0	C	65.5	304	1.6	266	188	17.8	22.3		18.1	-14.3	1	2
3458.0	3466.0	C	49.6	294	1.6	264	186	17.5	22.4		6.6	-9.9	1	2
3460.0	3468.0	C	25.6	54	1.6	261	185	18.0	22.5	6.4		.9	2	4
3462.0	3470.0	C	24.8	36	1.6	258	187	19.3	22.8	6.0		-1.6	2	4
3464.0	3472.0	D	18.4	228	1.6	254	187	20.4	23.1		-5.4	-5.5	1	2
3466.0	3474.0	D	41.9	303	1.5	255	185	20.9	23.5		8.7	-5.4	1	2
3468.0	3476.0	D	46.1	223	1.5	257	180	21.0	23.6		-16.5	-17.1	1	2
3470.0	3478.0	C	55.0	304	1.5	259	178	21.5	23.6		18.6	-4.9	1	2
3474.0	3482.0	C	59.9	86	1.4	253	182	21.7	24.3	-18.0		21.6	1	3
3476.0	3484.0	C	41.2	101	1.3	247	188	20.9	24.4		-1.3	9.6	1	2
3478.0	3486.0	C	69.8	353	1.2	239	193	20.9	24.4	14.5	-22.6		2	1
3480.0	3488.0	C	33.7	205	1.1	233	196	21.1	23.6		-14.4	-8.6	1	2
3482.0	3490.0	B	34.4	95	1.1	228	197	21.4	23.3	9.0		6.2	2	4
3484.0	3492.0	C	33.4	198	1.1	226	198	21.8	23.3	-7.6		7.3	2	4
3486.0	3494.0	D	29.3	233	1.1	233	195	21.4	23.3	-9.2		.7	2	4
3488.0	3496.0	C	43.8	291	1.3	238	192	21.4	23.5	-9.9		-13.0	2	4
3490.0	3498.0	C	43.6	287	1.4	245	189	20.8	23.5	-10.3		-12.8	2	4
3492.0	3500.0	C	40.3	195	1.5	248	188	20.6	23.6	-10.3		7.6	2	4
3494.0	3502.0	C	35.2	6	1.5	250	189	20.4	23.8	6.3		-7.7	2	4

LUBLEX

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
3496.0	3504.0	C	37.5	355	1.5	250	190	20.7	23.6	5.0			-10.1	2	4
3498.0	3506.0	C	35.9	2	1.3	250	189	21.0	23.1	6.1			-8.6	2	4
3500.0	3508.0	B	26.5	88	1.3	246	189	22.1	22.8	6.2			4.4	2	4
3502.0	3510.0	C	26.2	80	1.2	239	187	22.3	23.1	6.6			3.8	2	4
3504.0	3512.0	D	61.4	170	1.2	240	185	22.3	23.8	-14.9	10.6			2	1
3508.0	3516.0	D	69.4	165	1.2	255	187	22.1	23.6	-16.4	22.4			2	1
3510.0	3518.0	C	67.6	164	1.2	257	188	22.6	23.0	-13.9	22.4			2	1
3516.0	3524.0	C	26.0	348	1.0	240	188	22.8	21.5		10.1		3.1	1	2
3518.0	3526.0	B	44.0	307	1.1	242	190	23.7	21.4	14.3	10.0	-18.9		1	0
3520.0	3528.0	B	17.5	66	1.1	251	190	23.8	21.9	4.6			.7	2	4
3522.0	3530.0	B	28.8	7	1.1	256	190	23.2	23.1	5.6			-6.9	2	4
3524.0	3532.0	D	60.4	93	1.2	261	192	22.2	23.7	-17.1	5.3			1	4
3530.0	3538.0	D	27.6	139	1.3	265	194	20.6	22.8		-6.3		1.4	1	2
3532.0	3540.0	C	54.5	318	1.5	263	190	20.1	21.8		17.5		-3.8	1	2
3534.0	3542.0	B	58.1	303	1.6	262	187	19.7	21.1		14.4		-8.8	1	2
3536.0	3544.0	B	64.1	283	1.6	259	185	19.6	20.7		6.0		-19.7	1	2
3538.0	3546.0	C	20.8	261	1.6	258	186	19.4	20.5	-5.2			-3.0	2	4
3540.0	3548.0	B	22.7	260	1.5	257	189	19.4	20.4	-5.8			-2.9	2	4
3542.0	3550.0	B	22.3	274	1.5	257	192	19.4	20.4	-5.1			-3.7	2	4
3544.0	3552.0	C	43.5	261	1.4	257	194	19.4	20.4	-13.1			-5.5	2	4
3546.0	3554.0	C	40.7	291	1.4	254	196	19.5	20.4	9.7			-8.4	1	3
3548.0	3556.0	D	16.9	115	1.4	249	196	19.4	20.4	-3.5	-1.2			1	4
3550.0	3558.0	D	43.2	82	1.4	243	195	19.3	20.3		6.7		11.8	1	2
3552.0	3560.0	D	55.3	60	1.4	242	194	19.1	20.2		18.4		19.1	1	2
3554.0	3562.0	D	64.4	359	1.3	246	194	19.0	20.1	13.3	-10.8			2	1
3556.0	3564.0	D	65.2	358	1.2	250	193	19.0	20.0	13.6	-11.8			2	1
3558.0	3566.0	D	41.4	33	1.1	252	193	19.0	20.0	10.4	5.5			2	1
3560.0	3568.0	D	23.2	58	1.0	250	194	19.0	20.0	3.6	5.7			2	1
3562.0	3570.0	D	29.0	117	.9	251	194	18.8	19.8	-6.4			4.0	1	3
3564.0	3572.0	C	60.6	302	1.0	254	195	18.7	19.5		9.6		-12.3	1	2
3566.0	3574.0	B	47.8	278	1.0	256	196	18.7	19.3		-3.1		-12.4	1	2
3568.0	3576.0	D	66.9	208	1.0	254	197	18.7	19.1		-8.7		17.9	2	3
3570.0	3578.0	D	61.5	222	1.0	250	198	18.6	19.0		-15.1		8.6	2	3
3572.0	3580.0	C	50.0	206	1.0	249	198	18.6	19.0	-13.1			9.5	2	4
3574.0	3582.0	D	56.4	215	1.0	252	198	18.6	19.3	-18.3			9.4	2	4
3576.0	3584.0	C	57.1	274	1.0	256	198	18.8	19.4	-18.8			-11.4	2	4
3578.0	3586.0	C	69.5	213	1.0	259	198	18.9	19.4		-14.5		18.0	2	3
3580.0	3588.0	C	54.1	145	1.0	256	198	19.1	19.4	-18.4			2.6	1	3
3582.0	3590.0	D	54.3	300	1.0	255	199	19.2	19.5	16.3	5.2			1	4
3584.0	3592.0	D	59.7	285	1.0	254	200	19.3	19.7	-19.1			-15.5	2	4
3586.0	3594.0	C	31.5	297	.9	252	201	19.4	19.9	-5.8	-12.5			2	1
3588.0	3596.0	C	66.7	8	.9	247	202	19.5	20.2	15.5	-11.8			2	1
3590.0	3598.0	D	51.0	274	.8	243	203	19.6	20.4	-16.2			-8.2	2	4
3592.0	3600.0	C	39.1	289	.7	243	203	19.7	20.5	7.9	-1.2			1	4
3594.0	3602.0	C	30.4	280	.6	242	202	19.9	20.6	-7.3			-4.7	2	4
3596.0	3604.0	C	54.5	12	.6	242	201	20.0	20.7		-4.9		-16.1	2	3
3598.0	3606.0	D	46.8	164	.6	243	200	20.2	20.7	-15.2	-17.7			1	4
3600.0	3608.0	D	55.0	119	.6	243	199	20.3	20.7	-16.8	-4.9			1	4
3602.0	3610.0	C	57.5	91	.6	238	198	20.4	20.7	19.8			10.8	2	4
3604.0	3612.0	C	52.8	280	.6	236	197	20.5	20.7	-15.6			-11.9	2	4
3606.0	3614.0	C	52.8	280	.6	242	196	20.6	20.8	-15.4			-12.3	2	4
3608.0	3616.0	C	52.0	278	.5	257	195	20.7	20.9	-15.1			-11.9	2	4
3610.0	3618.0	C	53.7	19	.5	258	193	20.8	21.0		2.6		-12.7	2	3
3612.0	3620.0	C	46.9	354	.5	264	191	21.0	21.0	14.0			7.4	1	3
3614.0	3622.0	C	46.5	348	.6	259	188	21.0	20.9	14.[illegible]			6.4	1	3

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	DIA NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
3616.0	3624.0	B	43.0	339	.7	273	185	21.2	20.7	13.2			4.7	1	3
3618.0	3626.0	C	42.3	264	.7	269	181	21.2	20.9	8.6			-10.7	1	3
3620.0	3628.0	C	55.7	163	.7	272	177	21.4	21.3	-18.8			-11.5	1	3
3628.0	3636.0	C	41.1	276	.8	281	177	23.3	22.7	-8.4			-11.7	2	4
3630.0	3638.0	C	48.5	279	.9	281	176	22.4	22.4	-9.8			-15.7	2	4
3640.0	3648.0	D	22.1	135	1.3	280	172	19.7	20.1		-6.2		-.9	1	2
3646.0	3654.0	B	54.6	299	1.6	275	170	20.5	21.5		18.7		-3.2	1	2
3648.0	3656.0	B	54.7	297	1.5	274	172	21.0	21.8		17.4		-4.8	1	2
3650.0	3658.0	C	60.3	290	1.4	273	176	22.1	21.6		16.8		-9.9	1	2
3654.0	3662.0	B	58.5	80	1.2	268	182	23.2	22.5	21.1			13.2	2	4
3656.0	3664.0	C	31.2	342	1.2	269	182	22.1	22.9	3.8			-8.9	2	4
3658.0	3666.0	C	61.2	300	1.2	271	181	20.7	22.5		19.0		-9.2	1	2
3660.0	3668.0	C	60.3	292	1.2	273	181	19.6	21.7		12.4		-12.5	1	2
3662.0	3670.0	C	67.1	290	1.2	275	182	19.6	20.8		15.1		-17.3	1	2
3664.0	3672.0	D	19.4	136	1.2	275	183	19.7	20.4		4.8		4.7	2	3
3666.0	3674.0	D	58.5	130	1.3	276	183	19.7	20.3		-18.9		3.2	1	2
3668.0	3676.0	C	56.5	173	1.3	277	184	19.8	20.3		5.6		17.3	2	3
3670.0	3678.0	C	57.2	303	1.3	276	187	19.8	20.3		13.9		-7.9	1	2
3672.0	3680.0	C	31.0	272	1.3	276	190	19.7	20.4		-1.9		-7.3	1	2
3674.0	3682.0	C	44.7	263	1.2	272	194	19.7	20.6		-7.1		-13.5	1	2
3676.0	3684.0	D	46.8	263	1.2	267	195	19.7	20.7		-8.0		-14.7	1	2
3678.0	3686.0	C	14.8	162	1.2	262	196	19.7	21.2	-.5	2.7	4.5		2	0
3680.0	3688.0	D	63.8	174	1.1	257	197	19.7	21.9	-10.0	17.3			2	1
3682.0	3690.0	C	49.2	280	.9	259	200	19.7	22.5	11.0	-4.4			1	4
3684.0	3692.0	C	59.4	286	.7	250	205	19.8	22.9	16.9	-5.3			1	4
3686.0	3694.0	B	41.6	357	.5	243	209	20.1	22.7	12.8			2.0	1	3
3688.0	3696.0	B	9.5	140	.4	234	211	20.5	22.8	-2.3			1.2	1	3
3690.0	3698.0	C	15.7	211	.4	229	212	20.4	23.0	-3.0			3.0	2	4
3692.0	3700.0	B	17.0	203	.3	226	211	21.3	23.4	-2.8			3.8	2	4
3694.0	3702.0	B	35.8	234	.3	223	210	21.6	23.7	-10.7			3.7	2	4
3704.0	3712.0	D	40.2	289	.5	239	214	21.4	22.9	7.1			-11.8	1	3
3706.0	3714.0	C	38.0	106	.5	244	215	21.0	22.8	-5.7	5.2			1	4
3708.0	3716.0	C	59.3	136	.6	243	216	20.3	22.3		-6.0		15.4	1	2
3710.0	3718.0	C	15.7	228	.7	247	217	19.9	21.5		-5.7		-3.5	1	2
3712.0	3720.0	C	31.6	196	.8	245	217	19.8	20.4		-11.6		-3.6	1	2
3716.0	3724.0	D	37.2	190	.8	255	215	19.8	19.9		-14.0		-4.0	1	2
3718.0	3726.0	D	62.8	318	.9	254	214	19.8	19.8		9.4		-14.3	1	2
3726.0	3734.0	C	18.9	195	.9	239	219	20.2	20.8	-1.9	2.8			2	1
3728.0	3736.0	D	28.7	223	.8	236	220	20.4	20.6	-6.1			5.4	2	4
3730.0	3738.0	C	44.3	247	.7	229	221	20.6	20.1		-18.5		-13.6	1	2
3732.0	3740.0	C	59.0	328	.6	223	222	21.1	19.7		9.2		-11.1	1	2
3734.0	3742.0	D	62.2	192	.6	218	222	21.1	19.6	-8.1	19.1			2	1
3740.0	3748.0	D	38.5	166	.5	232	218	20.2	19.8	-11.2			1.1	1	3
3742.0	3750.0	D	45.6	186	.5	237	217	20.2	19.9		-18.0		-3.8	1	2
3744.0	3752.0	D	61.9	305	.6	238	216	20.3	20.0	18.5			-19.3	1	3
3748.0	3756.0	D	55.5	136	.6	233	214	20.9	20.4	-17.6	-6.3			1	4
3750.0	3758.0	D	51.1	290	.5	242	213	21.1	20.6		-6.3		-15.7	1	2
3752.0	3760.0	C	65.1	229	.5	243	212	21.3	20.4		-12.7		16.1	2	3
3754.0	3762.0	D	41.7	159	.5	249	212	21.2	20.3	-12.9	-11.4			1	4
3760.0	3768.0	C	66.8	293	.8	244	215	20.7	19.3	17.4	-10.3			1	4
3762.0	3770.0	C	60.9	39	.7	247	214	20.6	19.4	19.5			-16.5	2	4
3764.0	3772.0	C	62.3	33	.6	247	212	20.6	19.6	19.4			-18.8	2	4
3778.0	3786.0	D	38.5	270	.7	239	214	21.2	20.5		-9.8		-11.7	1	2
3780.0	3788.0	C	42.0	327	.6	227	216	21.4	20.6		6.7		-5.3	1	2
3782.0	3790.0	C	38.5	330	.5	220	218	21.5	21.9		6.2		-5.0	1	2

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
3784.0	3792.0	B	16.0	45	.5	209	219	21.6	23.6	2.0	5.9	.8		1	0
3786.0	3794.0	C	22.9	228	.5	195	219	21.8	25.2	-3.9			-5.4	1	3
3788.0	3796.0	B	9.8	277	.4	184	219	22.0	26.0	.8			-2.9	1	3
3790.0	3798.0	B	20.0	197	.4	169	219	22.2	26.1	-5.1	-7.6	3.7		1	0
3792.0	3800.0	C	54.9	151	.4	159	219	22.5	26.4	-23.7			11.6	1	3
3794.0	3802.0	C	57.3	353	.4	147	220	22.8	26.7		23.9		-3.0	1	2
3796.0	3804.0	C	9.4	246	.4	137	219	22.9	27.5		-3.4		-2.7	1	2
3798.0	3806.0	B	48.3	276	.4	123	218	23.3	27.7	6.2			-19.9	1	3
3800.0	3808.0	C	46.3	249	.4	105	215	23.9	28.1	-19.8			2.2	2	4
3802.0	3810.0	C	1.0	125	.3	69	211	24.6	28.5	.3			.3	2	4
3804.0	3812.0	D	48.4	236	.2	44	205	25.1	28.7	-3.4	-23.8			1	4
3810.0	3818.0	D	32.1	36	.6	334	187	25.4	27.9	11.3			-2.8	2	4
3812.0	3820.0	C	19.5	357	.8	308	184	25.7	27.5	3.9			-5.4	2	4
3814.0	3822.0	C	58.9	278	.8	298	181	25.8	26.7	-19.8			-25.5	2	4
3816.0	3824.0	C	51.2	83	.9	298	180	25.7	25.9	-13.6	4.0			1	4
3818.0	3826.0	C	23.0	27	1.0	299	179	25.6	24.7	7.2	4.4			2	1
3820.0	3828.0	C	41.0	348	1.2	298	179	25.5	23.8	8.9	-4.5			2	1
3822.0	3830.0	D	51.7	351	1.2	295	180	25.5	23.8	13.7	-5.2			2	1
3824.0	3832.0	C	66.5	260	1.2	288	180	25.4	23.7	23.3	-10.0			1	4
3826.0	3834.0	C	48.2	66	1.1	283	180	25.1	23.8	17.3			6.0	2	4
3828.0	3836.0	B	39.4	45	1.1	275	179	24.9	23.8	13.8			-.3	2	4
3830.0	3838.0	C	40.9	50	1.1	272	180	24.6	24.5	14.5			1.0	2	4
3832.0	3840.0	C	39.1	51	1.0	270	181	25.0	25.4	14.0			1.0	2	4
3834.0	3842.0	C	23.7	149	.9	270	184	25.3	26.3		6.3		7.6	2	3
3836.0	3844.0	C	25.3	175	.8	272	188	25.3	26.6	-4.6			7.0	2	4
3838.0	3846.0	D	15.5	177	.7	269	191	25.1	26.9	-2.4			3.6	2	4
3840.0	3848.0	B	25.4	300	.7	273	192	24.9	27.2	-4.6			-8.2	2	4
3842.0	3850.0	C	64.3	123	.7	275	192	25.1	27.0		-18.2		18.4	1	2
3850.0	3858.0	D	59.3	350	.7	265	186	24.0	27.5	13.1	-12.8			2	1
3852.0	3860.0	D	29.2	64	.7	273	186	23.9	27.5	9.8			2.8	2	4
3854.0	3862.0	C	45.3	223	.7	277	186	23.9	27.7		-17.5		.9	2	3
3856.0	3864.0	C	63.0	209	.8	283	186	23.4	27.5		-22.1		10.2	2	3
3858.0	3866.0	D	65.5	83	.8	277	185	23.1	26.9	-22.6	10.4			1	4
3860.0	3868.0	C	30.8	39	.9	278	186	22.5	27.0		11.2		9.8	1	2
3862.0	3870.0	D	45.3	95	.9	273	186	22.5	27.8		.4		13.8	1	2
3868.0	3876.0	C	47.1	234	.9	271	187	22.9	25.9	-19.0	-21.0			2	1
3870.0	3878.0	C	63.5	185	.9	277	188	23.0	24.5	-22.1	1.8			2	1
3872.0	3880.0	D	63.3	185	1.0	287	188	23.1	25.5	-21.6	2.3			2	1
3874.0	3882.0	C	34.5	356	.9	288	187	23.2	26.6	9.8			6.0	1	3
3876.0	3884.0	C	58.3	313	.9	294	186	23.6	27.6		23.7		-6.5	1	2
3878.0	3886.0	C	52.0	279	.8	295	185	24.0	26.7		2.3		-16.4	1	2
3880.0	3888.0	B	59.1	276	.8	300	185	24.0	25.7		1.2		-21.5	1	2
3882.0	3890.0	C	46.0	289	.9	306	185	23.7	24.6		6.2		-9.7	1	2
3884.0	3892.0	C	28.0	318	.9	307	184	23.1	23.8		8.9		-.3	1	2
3886.0	3894.0	C	29.0	302	1.0	309	183	22.7	23.3		6.5		-2.6	1	2
3888.0	3896.0	C	38.7	295	1.1	305	183	22.6	23.1		7.1		-5.4	1	2
3890.0	3898.0	C	53.5	227	1.2	310	185	22.5	22.5	-21.6	-21.0			2	1
3892.0	3900.0	D	48.9	306	1.2	316	187	22.4	21.7		12.8		-4.9	1	2
3894.0	3902.0	D	41.4	57	1.2	318	189	22.3	20.9		13.3		13.3	1	2
3896.0	3904.0	C	48.6	100	1.2	314	188	22.4	21.1	11.4			11.7	2	4
3898.0	3906.0	C	60.0	272	1.1	305	187	22.9	22.1	-21.2			-18.3	2	4
3900.0	3908.0	C	62.4	15	1.1	303	185	23.7	22.8		6.9		-19.3	2	3
3902.0	3910.0	C	63.1	15	1.1	302	185	23.6	22.7		7.2		-19.7	2	3
3904.0	3912.0	C	65.1	255	1.0	301	186	23.3	21.8	13.6	-18.2			1	4
3906.0	3914.0	D	32.2	298	.9	297	187	22.1	21.0	-3.4	-12.8	-5.2		2	0

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL	CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
3908.0	3916.0	C 39.0	160	.9	298	187	21.9	20.3	-4.2			11.3	2	4
3910.0	3918.0	C 47.3	172	.8	301	188	21.4	20.0	-13.8			-8.2	1	3
3912.0	3920.0	C 35.8	241	.8	306	188	21.0	19.3	1.2			-10.2	1	3
3914.0	3922.0	D 36.4	241	.9	309	187	20.5	19.0	1.4			-10.2	1	3
3916.0	3924.0	D 40.3	203	.9	308	185	19.9	19.0		-15.8		-10.5	1	2
3918.0	3926.0	D 51.6	328	.8	312	181	19.7	19.2		-13.5		-17.5	2	3
3922.0	3930.0	D 54.6	272	.9	314	171	19.6	19.7	16.7	5.6			1	4
3924.0	3932.0	D 56.3	268	1.0	308	170	19.6	19.7	-12.8			-17.3	2	4
3926.0	3934.0	D 59.4	283	1.0	307	168	19.8	19.7		14.8		-8.3	1	2
3930.0	3938.0	D 40.9	239	1.1	314	166	19.4	19.5	-10.5	-16.4			2	1
3932.0	3940.0	D 48.4	42	1.1	316	167	19.1	19.3		12.6		15.2	1	2
3934.0	3942.0	C 45.0	45	1.1	319	168	19.1	19.3		10.6		13.4	1	2
3936.0	3944.0	C 58.0	247	1.0	323	168	19.1	19.3		-5.4		-18.1	1	2
3938.0	3946.0	C 47.0	299	1.0	325	166	19.1	19.4	-.4			-15.1	2	4
3942.0	3950.0	D 34.7	158	1.1	327	163	19.1	19.4	-5.7			6.9	2	4
3944.0	3952.0	C 45.0	146	1.1	331	162	19.2	19.4	-6.2			11.5	2	4
3946.0	3954.0	C 45.2	145	1.2	330	162	19.2	19.5	-6.2			11.6	2	4
3948.0	3956.0	D 47.1	144	1.2	328	160	19.3	19.6	-11.9	-19.0	5.8		1	0
3950.0	3958.0	C 32.7	119	1.2	325	159	19.4	19.8	-.5	8.0			2	1
3952.0	3960.0	C 24.5	86	1.2	327	158	19.5	20.0	-5.4			3.1	1	3
3954.0	3962.0	B 20.7	119	1.2	326	157	19.6	20.2	-.5			5.0	2	4
3956.0	3964.0	B 23.2	81	1.2	328	156	19.8	20.5	-5.1			3.4	1	3
3958.0	3966.0	C 27.0	286	1.2	329	155	20.0	20.9	7.7			-.6	1	3
3960.0	3968.0	B 20.2	231	1.1	327	154	20.1	21.7	2.3	-1.3	-7.8		1	0
3962.0	3970.0	B 21.3	216	1.0	328	153	19.9	22.3	1.3	-3.2	-7.7		1	0
3964.0	3972.0	C 16.8	123	1.1	325	153	19.7	23.1	-4.1			-.7	1	3
3966.0	3974.0	B 9.8	314	1.1	324	152	19.4	23.7	2.2	3.6	-1.3		1	0
3968.0	3976.0	B 7.5	149	1.2	324	151	19.5	23.2		-2.1		-1.1	1	2
3970.0	3978.0	B 17.0	2	1.2	325	150	20.1	22.7	4.6			-1.0	2	4
3972.0	3980.0	B 27.3	333	1.2	323	148	20.8	21.8	6.1	.8			2	1
3974.0	3982.0	B 41.8	284	1.2	322	146	21.7	21.6	.9	-13.2			2	1
3980.0	3988.0	D 55.4	79	1.2	325	142	22.9	23.4	7.5			22.2	2	4
3982.0	3990.0	C 53.0	0	1.2	324	141	22.9	23.9	2.1			22.6	1	3
3984.0	3992.0	B 42.8	334	1.2	324	140	22.7	23.7	13.7	5.5	-21.3		2	0
3986.0	3994.0	C 42.1	325	1.2	320	139	22.6	23.8	9.5			11.7	1	3
3988.0	3996.0	B 33.4	347	1.2	315	139	22.6	23.4	10.5	7.3			2	1
3990.0	3998.0	C 53.8	297	1.2	311	138	22.9	23.3	9.4	-11.8			2	1
3992.0	4000.0	D 19.2	235	1.2	313	140	23.1	23.1	-3.4	-8.1			2	1
3994.0	4002.0	D 41.6	235	1.1	317	142	23.3	22.9	-9.5	-20.4			2	1
3996.0	4004.0	D 61.9	252	1.0	320	145	23.4	22.8		13.3		-14.1	1	2
3998.0	4006.0	C 62.3	143	1.0	318	148	23.0	22.9	-19.1			22.7	2	4
4000.0	4008.0	B 53.8	97	1.1	312	148	22.6	23.0	2.5			21.2	2	4
4002.0	4010.0	B 10.6	76	1.2	304	148	22.2	22.6	1.5			2.3	2	4
4004.0	4012.0	B 16.2	6	1.3	301	149	22.3	22.0		3.6		-1.0	2	3
4006.0	4014.0	B 30.4	193	1.4	299	151	22.6	21.3	-.4			-9.0	1	3
4008.0	4016.0	C 34.5	301	1.4	299	154	22.5	21.0	2.6	-8.4			2	1
4012.0	4020.0	C 54.3	129	1.4	301	159	21.2	21.1	-5.3	13.8			2	1
4014.0	4022.0	B 66.3	151	1.4	300	161	20.5	21.3	-18.0	7.6			2	1
4018.0	4026.0	C 41.5	153	1.3	299	165	20.5	20.9	-6.8	3.5			2	1
4022.0	4030.0	C 61.5	171	1.3	305	168	20.7	20.2	-17.3			-19.3	1	3
4026.0	4034.0	C 67.8	282	1.2	312	171	20.8	20.5		18.9		-15.3	1	2
4028.0	4036.0	C 65.5	280	1.1	314	172	20.7	20.6		14.5		-15.2	1	2
4034.0	4042.0	C 39.2	349	1.1	319	176	21.3	20.7	10.1	17.8			1	4
4048.0	4056.0	D 46.9	43	1.0	335	188	22.4	21.3	3.7	20.1			1	4
4050.0	4058.0	C 67.9	89	1.0	333	191	21.5	21.9	-20.2	11.1			1	4

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
4064.0	4072.0	C	53.2	56	1.1	327	198	20.2	20.5	19.1			-2.7	2	4
4066.0	4074.0	C	48.0	72	1.1	325	198	20.1	20.5	-1.8	13.2	18.0		1	0
4070.0	4078.0	C	68.8	120	1.1	324	197	20.0	20.4		-10.8		18.9	1	2
4072.0	4080.0	C	62.2	124	1.1	323	196	20.0	20.3		-11.0		12.1	1	2
4074.0	4082.0	C	58.4	125	1.2	322	196	20.0	20.3		-10.5		9.6	1	2
4076.0	4084.0	C	55.9	117	1.1	320	194	20.0	20.2		-6.1		11.0	1	2
4078.0	4086.0	C	45.6	108	1.1	319	194	19.9	20.1		-1.1		9.4	1	2
4080.0	4088.0	D	65.9	131	1.1	319	194	19.8	20.0		-18.6		9.7	1	2
4082.0	4090.0	D	62.2	285	1.1	320	195	19.6	19.9	19.5	-.2			1	4
4084.0	4092.0	D	24.1	239	1.1	320	196	19.6	19.8	-6.3	-6.3			2	1
4086.0	4094.0	C	38.6	159	1.1	321	196	19.6	19.6		-11.9		-1.4	1	2
4092.0	4100.0	C	69.8	178	1.1	320	197	19.6	19.4	-15.7	16.7			2	1
4094.0	4102.0	C	66.5	128	1.1	320	198	19.6	19.4		-14.5		12.7	1	2
4096.0	4104.0	C	44.7	154	1.1	320	199	19.6	19.4		-13.4		-.3	1	2
4098.0	4106.0	C	46.3	146	1.1	321	199	19.6	19.4		-12.0		1.8	1	2
4100.0	4108.0	C	65.8	128	1.0	321	199	19.6	19.4		-13.5		12.7	1	2
4102.0	4110.0	D	32.9	166	1.0	322	198	19.6	19.4	-2.9	6.3	10.5		2	0
4104.0	4112.0	D	13.6	174	1.0	323	197	19.6	19.4	-1.3			2.9	2	4
4106.0	4114.0	D	11.5	204	1.0	326	197	19.6	19.4	-2.3			1.5	2	4
4108.0	4116.0	D	60.7	101	1.0	327	196	19.6	19.5	18.3			15.3	2	4
4116.0	4124.0	C	45.2	52	1.0	333	190	19.9	20.2		15.3		14.3	1	2
4118.0	4126.0	B	38.6	83	1.0	336	188	20.0	20.2		4.5		9.9	1	2
4120.0	4128.0	C	39.7	113	1.0	337	187	20.2	20.2		-4.3		5.8	1	2
4122.0	4130.0	D	20.9	203	.9	338	185	20.3	20.3		-7.1		-4.8	1	2
4124.0	4132.0	C	55.7	4	.9	338	184	20.4	20.8	15.3			-15.7	2	4
4126.0	4134.0	C	53.0	9	.9	339	183	20.6	21.6	15.4			-12.7	2	4
4128.0	4136.0	B	54.5	108	1.0	340	182	20.7	22.6	11.3			16.7	2	4
4130.0	4138.0	C	46.2	325	.9	340	180	20.9	23.5	1.8	-14.7			2	1
4132.0	4140.0	B	30.1	322	.9	340	179	21.2	23.6	1.5	-8.5	-10.2		2	0
4134.0	4142.0	B	22.5	139	.8	341	177	21.3	23.6	-.3			6.3	2	4
4136.0	4144.0	C	42.3	294	.8	341	177	21.6	23.1	-4.7			-14.2	2	4
4138.0	4146.0	C	53.8	180	.8	342	176	22.2	23.3	-15.8			13.6	2	4
4140.0	4148.0	C	39.7	309	.9	340	175	22.5	23.6	-.5			-13.9	2	4
4142.0	4150.0	C	22.5	195	.9	340	175	22.9	23.6	-6.0	-3.4			2	1
4144.0	4152.0	C	61.7	325	.9	338	173	23.3	23.1	9.2	-21.1			2	1
4146.0	4154.0	D	39.3	349	.9	336	172	23.5	22.4	9.4			-10.4	2	4
4154.0	4162.0	C	72.3	144	1.0	335	162	22.6	22.6	-21.2	21.1			2	1
4156.0	4164.0	D	54.7	147	1.1	335	159	22.6	22.7	-11.7	6.5			2	1
4158.0	4166.0	D	40.6	279	1.2	334	155	22.6	23.1	-2.5	-16.6			2	1
4162.0	4170.0	D	30.6	303	1.3	331	148	22.6	23.7	9.4			3.4	1	3
4164.0	4172.0	C	47.3	29	1.3	329	144	22.7	24.3	-6.5	11.1			1	4
4166.0	4174.0	B	33.1	13	1.3	326	141	23.0	24.8		9.7		11.4	1	2
4168.0	4176.0	B	30.9	13	1.3	325	139	23.8	24.8		8.9		10.6	1	2
4170.0	4178.0	B	12.7	339	1.3	323	138	24.2	24.6		5.7		3.9	1	2
4172.0	4180.0	C	62.1	237	1.3	323	137	24.1	23.8		8.5		-17.9	1	2
4174.0	4182.0	C	57.2	145	1.3	323	137	23.4	23.5		-5.4		14.4	2	3
4176.0	4184.0	C	63.7	127	1.4	321	136	22.6	23.0	-17.8	7.0			2	1
4178.0	4186.0	C	40.5	256	1.4	320	138	22.2	22.7	-3.7	-17.2			2	1
4182.0	4190.0	D	51.0	180	1.5	323	141	22.4	22.4	-18.8	-17.2			2	1
4184.0	4192.0	D	32.3	339	1.5	324	141	22.4	22.9	4.9			9.4	1	3
4186.0	4194.0	C	42.3	318	1.5	323	141	22.5	23.0	10.2	-1.1			2	1
4188.0	4196.0	C	30.4	4	1.5	322	141	22.9	23.2	9.9			-.7	2	4
4190.0	4198.0	C	51.7	310	1.5	322	141	23.1	23.4	12.2	-5.9			2	1
4192.0	4200.0	D	58.4	293	1.5	320	142	23.4	23.5	8.0	-19.2			2	1
4194.0	4202.0	C	62.3	243	1.4	320	142	23.7	24.0		9.6		-17.9	1	2

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS MBL	HBO	HLR	HBR	BASE ARM	M
4196.0	4204.0	D	60.5	300	1.4	320	142	23.4	24.4	11.8	-16.9			2	1
4206.0	4214.0	D	38.9	320	1.5	318	147	21.9	19.4	10.2			8.3	1	3
4208.0	4216.0	D	26.0	305	1.5	317	148	20.8	19.4	3.1			-6.9	2	4
4210.0	4218.0	D	27.6	304	1.5	317	150	19.8	19.3	2.7			-7.3	2	4
4218.0	4226.0	C	13.3	42	1.5	321	149	20.0	19.6	3.1	4.3			2	1
4220.0	4228.0	C	56.8	318	1.4	321	148	20.1	19.8	13.5			-18.6	2	4
4222.0	4230.0	C	57.3	317	1.4	322	146	20.2	20.4	13.9			-18.9	2	4
4224.0	4232.0	C	48.3	285	1.3	324	145	20.3	21.5		18.3		1.3	1	2
4226.0	4234.0	B	52.3	266	1.2	329	144	20.5	22.7	19.9			-5.5	1	3
4228.0	4236.0	C	22.0	66	1.1	333	145	20.8	23.7	4.0			5.4	2	4
4230.0	4238.0	C	27.3	90	1.0	339	146	21.3	23.9	2.2			8.0	2	4
4232.0	4240.0	C	27.6	79	.9	340	146	21.9	23.3	3.6	11.3			2	1
4234.0	4242.0	B	12.8	298	.8	339	146	22.6	22.7	1.3	-2.3			2	1
4242.0	4250.0	D	43.5	67	.9	335	144	22.8	23.9	9.0			13.2	2	4
4246.0	4254.0	D	62.0	256	1.0	333	144	24.3	23.2		17.6		-11.5	1	2
4258.0	4266.0	D	12.1	321	1.2	322	143	23.4	27.8	2.7			-2.8	2	4
4260.0	4268.0	C	35.7	264	1.2	321	142	23.8	28.9	13.7			-4.1	1	3
4262.0	4270.0	D	25.2	327	1.2	320	141	23.9	30.2		11.8		6.6	1	2
4268.0	4276.0	C	62.4	124	1.2	319	136	22.9	32.5	-14.0			26.9	2	4
4270.0	4278.0	D	67.8	134	1.2	319	135	22.8	32.6	-26.0			26.7	2	4
4274.0	4282.0	C	60.7	55	1.2	318	132	22.4	33.0		-8.2		24.5	1	2
4276.0	4284.0	C	37.7	75	1.2	317	131	22.4	32.5	5.7			15.0	2	4
4278.0	4286.0	B	28.2	64	1.2	316	130	22.6	31.3	-10.8	-4.4	15.4		1	0
4282.0	4290.0	C	60.4	288	1.2	317	128	22.6	30.0	10.2	-18.6			2	1
4284.0	4292.0	C	56.3	282	1.2	317	127	22.1	29.4	25.0			6.4	1	3
4290.0	4298.0	C	59.2	289	1.2	315	124	20.8	24.8	11.8	-11.2			2	1
4292.0	4300.0	C	57.5	303	1.2	315	123	20.9	25.6	17.1			17.3	1	3
4294.0	4302.0	D	54.5	15	1.2	314	122	21.5	26.7	-13.4			23.0	1	3
4300.0	4308.0	C	52.5	312	1.3	311	119	20.8	24.3	17.3	7.1			2	1
4302.0	4310.0	C	32.0	202	1.3	310	119	19.9	22.4	6.3			-7.5	1	3
4304.0	4312.0	C	64.2	225	1.3	310	120	19.6	20.7		11.1		-15.2	1	2
4306.0	4314.0	C	32.2	283	1.4	308	122	19.3	20.1	8.1	12.2			1	4
4308.0	4316.0	C	31.8	226	1.4	308	122	18.9	19.7	-4.3			-7.5	2	4
4310.0	4318.0	C	40.6	234	1.4	307	122	18.8	19.4	-4.4	-15.5			2	1
4312.0	4320.0	B	42.7	234	1.4	306	121	18.8	19.4	-4.7	-16.6			2	1
4314.0	4322.0	C	50.1	143	1.5	304	120	18.9	19.4	-14.2	-8.6			2	1
4316.0	4324.0	C	58.5	280	1.6	304	120	19.0	19.5	9.9	-11.1			2	1
4318.0	4326.0	C	65.1	292	1.6	302	119	19.1	19.7	19.2	-5.5			2	1
4320.0	4328.0	D	59.9	314	1.6	302	119	19.2	20.0		9.9		-12.1	2	3
4322.0	4330.0	D	61.1	208	1.6	300	118	19.4	20.2	18.4	.5			1	4
4324.0	4332.0	C	66.6	313	1.6	298	118	19.5	20.3		12.9		-17.0	2	3
4326.0	4334.0	C	66.5	317	1.7	296	118	19.6	20.2		15.6		-15.3	2	3
4328.0	4336.0	D	47.1	259	1.7	295	119	19.7	20.2	15.8			1.3	1	3
4330.0	4338.0	C	51.5	224	1.7	296	120	19.8	20.3	15.9			-9.2	1	3
4332.0	4340.0	D	64.8	23	1.7	297	120	19.8	20.5	-18.9	5.6			1	4
4334.0	4342.0	C	56.0	150	1.7	299	120	19.9	20.6	-19.5	-15.1			2	1
4336.0	4344.0	C	50.7	264	1.7	298	119	20.0	20.7	3.1	-15.0			2	1
4338.0	4346.0	C	15.4	39	1.7	297	119	20.0	20.8	2.6			3.0	2	4
4340.0	4348.0	C	46.4	78	1.8	297	118	20.1	20.9	-.7	13.8			2	1
4342.0	4350.0	C	60.7	297	1.7	298	118	20.2	21.0		-.2		-19.4	2	3
4344.0	4352.0	C	60.3	293	1.7	298	117	20.3	21.2	17.7	-2.7			2	1
4346.0	4354.0	B	61.7	289	1.7	300	116	20.3	21.7	17.6	-5.2			2	1
4350.0	4358.0	D	15.1	171	1.8	300	114	20.4	22.3		-5.0		-1.3	2	3
4354.0	4362.0	C	45.5	298	1.8	299	114	20.5	21.4	11.9	1.7			2	1
4356.0	4364.0	B	7.0	318	1.8	300	113	20.5	21.0	2.1	1.2			2	1

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	DIA NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
4358.0	4366.0	C	5.6	102	1.9	299	113	20.5	21.0	-.4	.5			2	1
4360.0	4368.0	D	51.1	18	1.9	299	112	20.5	21.1		2.8		14.5	1	2
4362.0	4370.0	C	54.3	294	1.9	298	111	20.5	21.3	14.4			16.0	1	3
4364.0	4372.0	C	56.4	280	1.9	297	110	20.5	22.1	19.4			13.1	1	3
4366.0	4374.0	B	60.1	99	1.8	296	108	20.5	23.0	-19.5			-13.3	1	3
4368.0	4376.0	C	65.5	102	1.8	294	104	20.5	24.2		2.2		21.9	2	3
4370.0	4378.0	D	46.1	342	1.8	292	100	20.5	25.1		10.7		17.2	1	2
4372.0	4380.0	C	12.6	26	1.7	290	95	20.5	25.1	2.2	5.4			2	1
4374.0	4382.0	C	61.4	97	1.7	288	91	20.8	24.6	-19.6	-3.8			2	1
4384.0	4392.0	C	51.2	196	2.0	286	85	19.8	21.1		9.5		-7.4	1	2
4386.0	4394.0	C	45.5	143	2.1	286	84	19.5	20.5		-17.0		-3.8	2	3
4388.0	4396.0	C	40.4	143	2.1	286	83	19.5	20.0	3.4			-10.8	1	3
4390.0	4398.0	C	39.7	150	2.1	284	81	19.5	19.9		-14.9		-5.0	2	3
4392.0	4400.0	C	33.5	150	2.1	284	79	19.5	19.9		-3.6		-7.7	1	2
4398.0	4406.0	C	22.3	127	2.0	282	75	19.7	20.0	-5.2			-.9	2	4
4400.0	4408.0	C	43.8	119	2.0	281	73	19.8	20.2	.5			-12.7	1	3
4402.0	4410.0	C	62.1	78	2.0	281	72	20.0	20.3		-3.7		15.6	2	3
4404.0	4412.0	C	56.7	91	2.0	281	70	20.1	20.4	-8.0			-18.5	1	3
4406.0	4414.0	D	61.8	78	2.0	281	68	20.2	20.5	-14.5			-20.0	1	3
4408.0	4416.0	D	50.8	125	2.0	281	66	20.2	20.6	4.2	-11.9			1	4
4410.0	4418.0	C	41.8	278	2.0	280	64	20.2	20.9	13.6	11.1			2	1
4412.0	4420.0	C	33.2	29	2.0	279	61	20.2	21.3	-2.1	7.9	10.5		2	0
4414.0	4422.0	C	33.2	109	2.0	278	58	20.2	21.7	-9.0	-10.4			2	1
4416.0	4424.0	D	68.3	74	2.0	276	55	20.2	22.1		-16.4		13.7	2	3
4420.0	4428.0	C	48.9	293	2.0	274	48	20.1	22.8		10.9		18.0	1	2
4422.0	4430.0	C	57.2	311	2.0	273	45	20.1	23.4	-17.8	3.0			1	4
4424.0	4432.0	C	28.3	87	2.0	272	43	20.1	23.1	-7.6	-7.9			2	1
4426.0	4434.0	D	52.3	165	2.0	271	40	20.0	22.8		15.1		-4.1	1	2
4432.0	4440.0	C	55.7	299	2.0	269	32	19.9	21.1	17.6			15.4	2	4
4434.0	4442.0	C	36.8	321	2.0	267	29	19.9	21.1	5.1			10.4	2	4
4436.0	4444.0	C	62.6	13	1.9	265	27	19.9	20.8	-13.2	9.7			2	1
4438.0	4446.0	D	54.7	103	1.9	263	24	19.9	20.6	11.1	-4.7			1	4
4440.0	4448.0	C	30.1	337	1.9	260	21	19.9	20.5	.3	8.9	7.9		2	0
4442.0	4450.0	D	51.2	170	1.9	258	16	19.8	20.3		-10.3		-16.5	2	3
4444.0	4452.0	D	44.5	308	1.9	256	13	19.7	20.1		-8.3		5.3	1	2
4446.0	4454.0	D	57.6	79	1.9	254	10	19.8	20.1		-10.4		-19.0	1	2
4454.0	4462.0	D	64.0	162	1.7	249	358	19.8	20.2	14.6	-10.3			2	1
4456.0	4464.0	D	26.9	347	1.7	248	354	19.8	20.3	-3.9			5.9	2	4
4458.0	4466.0	D	43.3	171	1.7	247	352	19.9	20.5		19.0		9.6	1	2
4460.0	4468.0	D	53.3	126	1.7	245	349	20.0	20.5		19.5		.9	1	2
4468.0	4476.0	C	28.0	82	1.5	244	339	19.8	20.2	6.1			-3.7	1	3
4470.0	4478.0	D	30.0	318	1.5	245	337	19.8	20.4	-7.6			-3.3	1	3
4472.0	4480.0	D	48.0	295	1.5	245	335	19.8	20.4	-.8	15.4			2	1
4474.0	4482.0	C	45.6	113	1.4	244	333	19.8	20.2	13.9	15.4			1	4
4476.0	4484.0	C	45.8	101	1.4	244	330	19.7	20.0	-.9			-13.9	2	4
4478.0	4486.0	C	45.7	99	1.4	243	328	19.7	20.0	-.8			-13.9	2	4
4480.0	4488.0	C	46.5	84	1.4	244	326	19.8	20.0	-4.2			-13.6	2	4
4482.0	4490.0	C	48.0	88	1.4	245	324	19.9	20.1	-2.8			-14.8	2	4
4484.0	4492.0	D	47.5	87	1.4	245	321	20.0	20.2	-2.4	-17.0			2	1
4486.0	4494.0	C	53.2	329	1.4	244	318	20.0	20.3		-4.7		10.9	2	3
4488.0	4496.0	C	55.0	332	1.3	240	315	20.0	20.2	-9.6			-17.7	1	3
4490.0	4498.0	D	22.3	182	1.2	240	312	19.9	20.1		6.7		.7	2	3
4494.0	4502.0	D	61.4	29	1.2	243	308	19.7	20.1	14.5	-5.9			1	4
4498.0	4506.0	D	41.7	202	1.1	246	304	19.7	20.1	-7.3			10.8	1	3
4500.0	4508.0	C	56.7	322	.1	248	302	19.7	20.1	-9.7			-19.4	1	3

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL	CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
4502.0	4510.0	D 68.1	191	1.1	247	300	19.7	20.1	-16.0	16.6			1	4
4508.0	4516.0	C 46.5	235	1.0	248	294	19.7	20.1	-14.9			3.9	1	3
4510.0	4518.0	C 22.5	18	1.0	250	292	19.7	20.1	-4.5			-3.6	2	4
4512.0	4520.0	C 24.4	122	1.0	251	290	19.6	20.1	3.1			5.2	1	3
4520.0	4528.0	C 50.2	119	.8	251	281	19.7	20.0	14.8	7.6			2	1
4524.0	4532.0	C 65.4	292	.7	251	275	19.7	20.0		-12.9		14.7	2	3
4526.0	4534.0	C 54.9	302	.7	253	273	19.7	19.9	-5.5			-19.5	1	3
4530.0	4538.0	C 29.8	169	.7	261	268	19.6	19.9	6.4	11.2			2	1
4532.0	4540.0	D 46.6	112	.7	264	266	19.6	20.0	13.7	9.2			2	1
4534.0	4542.0	D 46.8	149	.7	263	264	19.9	20.0	13.9			5.5	2	4
4536.0	4544.0	D 38.6	57	.7	264	261	20.0	20.0	3.8			-10.4	2	4
4538.0	4546.0	D 61.2	348	.7	266	259	19.9	19.7	17.6	-.9			1	4
4540.0	4548.0	D 69.0	2	.7	271	257	19.5	19.5		12.7		-18.3	1	2
4542.0	4550.0	C 65.2	3	.8	277	255	19.2	19.4		12.7		-13.7	1	2
4544.0	4552.0	D 55.0	102	.8	280	253	19.1	19.4	18.1	13.1			2	1
4546.0	4554.0	D 55.0	163	.8	284	251	19.2	19.4	13.0			14.2	2	4
4548.0	4556.0	C 55.0	164	.9	284	249	19.2	19.4	-14.8			12.3	1	3
4550.0	4558.0	C 53.5	176	.8	288	246	19.2	19.4	-16.6			7.7	1	3
4552.0	4560.0	C 56.8	210	.9	289	244	19.2	19.3	-4.3	16.1			2	1
4554.0	4562.0	B 29.7	54	.8	289	241	19.3	19.3		10.7		4.6	1	2
4556.0	4564.0	C 29.2	148	.9	289	239	19.4	19.3		10.5		5.3	2	3
4558.0	4566.0	B 20.9	123	.9	286	238	19.5	19.3	-1.8			4.7	1	3
4560.0	4568.0	B 23.9	251	.9	290	236	19.6	19.2		-2.6		3.0	2	3
4562.0	4570.0	B 38.0	33	.8	287	234	19.3	19.1		13.9		4.2	1	2
4564.0	4572.0	C 34.1	37	.8	290	232	19.1	19.0		12.3		4.4	1	2
4566.0	4574.0	C 41.5	44	.8	289	230	18.8	18.9		10.3		7.2	1	2
4568.0	4576.0	C 37.7	52	.8	294	228	18.8	18.8	6.8			7.5	1	3
4570.0	4578.0	D 19.6	68	.8	295	226	18.8	18.7	4.5			-.3	2	4
4576.0	4584.0	D 38.3	69	.8	293	221	18.8	18.6	9.8			-3.1	2	4
4578.0	4586.0	C 64.1	16	.9	297	220	18.8	18.6	9.8	-15.8			2	1
4580.0	4588.0	C 69.1	140	.9	296	218	18.7	18.6		-9.9		17.8	1	2
4582.0	4590.0	D 67.1	141	.9	300	217	18.7	18.6		-10.4		15.4	1	2
4586.0	4594.0	D 46.8	253	.9	304	214	18.8	18.9		-15.8		-14.4	1	2
4588.0	4596.0	C 39.7	269	.9	305	213	18.9	19.1		-8.7		-11.2	1	2
4590.0	4598.0	B 21.0	216	.9	305	211	18.9	19.4		-7.2		-4.1	1	2
4592.0	4600.0	C 57.3	285	.9	309	209	19.2	19.6		-7.4		-19.0	1	2
4594.0	4602.0	C 59.3	35	.9	309	207	20.3	20.4		5.0		-14.5	2	3
4596.0	4604.0	B 48.5	16	.9	315	204	21.5	22.0	10.2	-3.9			2	1
4598.0	4606.0	B 9.6	214	.8	321	202	22.5	23.3	-2.3			1.2	2	4
4600.0	4608.0	B 10.2	214	.8	324	200	22.6	24.4	-2.5			1.2	2	4
4602.0	4610.0	C 19.4	261	.8	324	198	22.9	23.9	-5.6			-2.2	2	4
4604.0	4612.0	D 29.5	328	1.0	317	196	22.0	23.3		8.6		-.9	1	2
4606.0	4614.0	B 29.1	303	1.2	314	195	21.4	21.8		4.0		-4.0	1	2
4608.0	4616.0	B 42.2	283	1.3	312	193	19.9	20.2		.5		-9.3	1	2
4610.0	4618.0	B 57.4	282	1.4	312	191	19.6	19.3		.6		-15.5	1	2
4614.0	4622.0	D 55.7	217	1.5	311	189	19.2	19.3	-19.0			5.6	2	4
4616.0	4624.0	D 50.4	215	1.5	311	189	19.1	19.5	-15.6	-10.8			2	1
4620.0	4628.0	D 55.4	70	1.5	309	189	19.1	19.3	-5.0	13.6			1	4
4642.0	4650.0	C 53.6	59	1.5	309	202	18.7	18.7	17.4	14.6			2	1
4644.0	4652.0	C 28.7	141	1.6	311	203	18.7	18.6		-4.7		1.8	1	2
4646.0	4654.0	D 33.8	264	1.5	310	203	18.7	18.6		-6.1		-8.8	1	2
4648.0	4656.0	C 52.1	289	1.5	307	203	18.7	18.6	-13.5			-11.6	2	4
4650.0	4658.0	C 59.2	294	1.4	306	203	18.7	18.6	-16.2			-16.7	2	4
4654.0	4662.0	C 38.3	32	1.4	309	201	18.6	18.6	6.1	14.6			1	4
4656.0	4664.0	B 34.4	32	1.4	309	200	18.6	18.6	7.1	2.1	-12.7		2	0

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
4658.0	4666.0	B	18.4	46	1.4	311	199	18.6	18.5	1.6			4.0	1	3
4660.0	4668.0	C	19.8	47	1.4	312	198	18.6	18.5	4.4			-1.6	2	4
4662.0	4670.0	C	52.6	135	1.5	314	197	18.6	18.4	4.6			15.5	2	4
4664.0	4672.0	C	54.2	177	1.5	314	196	18.6	18.5	-7.8			15.7	2	4
4666.0	4674.0	C	59.3	122	1.6	314	195	18.6	18.5	-18.3	-8.4			1	4
4674.0	4682.0	D	35.4	252	1.7	312	186	18.9	19.0		-5.2		-9.0	1	2
4676.0	4684.0	D	54.8	199	1.7	312	183	19.0	19.3	-8.6			-16.5	1	3
4678.0	4686.0	C	68.1	159	1.7	313	180	19.2	19.6	-12.7	16.0			2	1
4680.0	4688.0	D	40.4	273	1.7	314	177	19.5	20.0	10.0			-7.8	1	3
4682.0	4690.0	C	67.5	159	1.7	314	176	19.8	20.5	-14.9	12.9			2	1
4684.0	4692.0	B	45.3	295	1.6	316	174	20.3	21.1	15.2			-4.2	1	3
4686.0	4694.0	B	8.0	178	1.6	317	172	21.0	21.8	-1.6			.9	2	4
4688.0	4696.0	B	38.0	290	1.4	319	168	21.8	22.6	-2.9			-12.6	2	4
4690.0	4698.0	C	41.5	289	1.4	320	165	22.4	23.2	-2.9			-14.7	2	4
4692.0	4700.0	C	24.2	278	1.4	319	161	23.2	23.9		5.4		-2.2	1	2
4694.0	4702.0	C	39.6	123	1.5	318	157	23.8	24.4	-2.3			13.2	2	4
4696.0	4704.0	C	38.0	284	1.5	318	152	24.3	24.3	-.4			-14.1	2	4
4704.0	4712.0	C	58.0	321	1.5	313	135	24.4	23.6	19.0			22.4	1	3
4706.0	4714.0	C	61.3	324	1.5	313	132	24.9	23.9		9.7		-18.7	2	3
4716.0	4724.0	C	66.0	201	1.9	308	121	26.4	24.1	24.6	-9.0			1	4
4718.0	4726.0	C	50.1	278	1.9	304	117	26.9	23.3	26.8			11.7	1	3
4720.0	4728.0	C	40.5	287	2.0	301	113	27.5	22.5	13.4			11.6	1	3
4722.0	4730.0	C	66.4	308	2.0	300	110	27.6	21.9		17.1		-24.5	2	3
4724.0	4732.0	C	51.3	323	2.1	300	109	27.5	21.6	23.3	16.2			2	1
4726.0	4734.0	D	47.4	316	2.1	299	108	27.0	21.8	8.0			19.9	1	3
4728.0	4736.0	D	47.0	302	2.2	300	108	26.3	22.0	11.8			17.8	1	3
4730.0	4738.0	D	37.2	305	2.3	299	108	25.9	22.7	7.6			12.8	1	3
4736.0	4744.0	D	50.0	60	2.5	299	107	24.7	23.9		20.5		19.6	2	3
4738.0	4746.0	D	49.1	72	2.6	298	106	24.1	23.7	-18.1			-3.2	1	3
4742.0	4750.0	D	44.0	73	2.7	298	102	22.4	22.8		10.6		14.0	2	3
4744.0	4752.0	C	51.3	353	2.8	297	99	22.3	22.5	-9.5	9.3			1	4
4746.0	4754.0	C	58.7	353	2.8	298	97	22.4	21.9	-13.6	10.0			1	4
4748.0	4756.0	D	58.6	351	2.8	298	93	23.3	21.8	-13.8	9.6			1	4
4750.0	4758.0	D	40.8	313	2.7	298	90	24.3	21.9	15.4			-1.5	2	4
4754.0	4762.0	D	46.1	166	2.7	296	82	24.3	22.6	10.2	-1.8			1	4
4756.0	4764.0	C	27.1	66	2.6	293	79	23.9	22.5	-3.9			7.0	2	4
4758.0	4766.0	C	27.3	44	2.7	292	75	22.5	21.9	-1.3			7.7	2	4
4760.0	4768.0	B	39.1	9	2.7	290	71	21.3	21.0	4.3			11.6	2	4
4762.0	4770.0	B	42.9	16	2.7	289	68	20.3	19.8	2.1			13.0	2	4
4764.0	4772.0	B	44.4	11	2.7	288	66	19.2	19.1	3.0			13.1	2	4
4766.0	4774.0	B	60.8	358	2.7	288	65	19.2	19.1		-12.8		10.3	1	2
4768.0	4776.0	C	13.2	316	2.7	287	66	19.4	19.3	-1.3			3.6	1	3
4770.0	4778.0	C	19.2	94	2.7	288	67	19.6	19.5	-1.4			-3.9	1	3
4772.0	4780.0	B	38.4	344	2.7	288	68	20.3	20.3	7.8	16.9	1.0		2	0
4774.0	4782.0	B	36.9	354	2.8	288	69	21.1	21.3	-9.9			6.5	1	3
4776.0	4784.0	B	31.7	356	2.8	287	68	21.8	22.7	5.5			8.8	2	4
4778.0	4786.0	B	25.5	7	2.7	286	67	23.0	24.0	-7.7	-4.6			1	4
4780.0	4788.0	B	50.9	313	2.5	284	65	23.5	24.5	-8.6	12.6			1	4
4782.0	4790.0	B	13.2	267	2.3	283	63	23.8	24.8	4.5			-1.4	2	4
4784.0	4792.0	C	8.6	238	2.1	281	62	24.5	24.7	2.4			-2.1	2	4
4786.0	4794.0	C	29.6	247	2.0	280	61	24.6	24.6	8.4			-6.4	2	4
4788.0	4796.0	C	59.0	160	1.8	280	61	24.7	25.3		7.1		-16.4	1	2
4790.0	4798.0	D	50.7	67	1.8	281	59	24.6	25.8	-12.3			-16.0	1	3
4800.0	4808.0	C	71.9	57	1.8	265	36	26.1	22.7		-22.4		23.0	2	3
4804.0	4812.0	C	18.0	157	.9	272	32	25.7	22.7	.0	-5.3			2	1

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
4806.0	4814.0	C	9.0	250	1.9	272	30	25.5	22.4	3.2	3.0			2	1
4808.0	4816.0	C	5.9	331	2.0	274	31	25.5	21.8	.9	2.7			2	1
4810.0	4818.0	C	12.0	152	2.2	274	31	24.8	21.7	.0	-3.2			2	1
4812.0	4820.0	C	35.2	357	2.3	275	30	24.5	21.7	-2.5	9.1			2	1
4814.0	4822.0	C	52.4	359	2.3	276	27	23.3	21.3	-6.4			20.2	2	4
4816.0	4824.0	C	64.9	284	2.4	277	24	22.3	20.9	-19.9	9.5			1	4
4818.0	4826.0	C	50.6	216	2.4	279	16	21.0	20.4	17.1			-7.5	2	4
4820.0	4828.0	C	65.7	259	2.2	278	11	21.3	20.5	-13.9	19.1			1	4
4830.0	4838.0	C	68.3	282	1.9	269	351	19.5	19.4		-19.0		15.6	1	2
4832.0	4840.0	C	50.6	264	1.9	269	349	19.6	19.4		-2.1		11.6	1	2
4836.0	4844.0	D	63.1	137	1.8	269	345	20.7	19.5	8.9	-16.6			2	1
4840.0	4848.0	C	33.9	277	1.7	262	339	20.9	20.0	2.9	12.7			2	1
4842.0	4850.0	C	33.9	270	1.7	261	338	20.9	20.9	4.1			9.7	2	4
4844.0	4852.0	C	48.4	120	1.7	261	337	20.6	20.8	2.4	-13.2			2	1
4846.0	4854.0	C	21.9	35	1.7	259	334	20.4	20.6		-4.1		-5.4	1	2
4848.0	4856.0	C	60.6	50	1.6	255	329	20.3	20.2		-5.6		-19.4	1	2
4850.0	4858.0	D	36.2	16	1.5	253	324	20.3	20.4		-9.1		-10.2	1	2
4856.0	4864.0	D	63.4	196	1.3	255	311	20.9	20.2	-9.7	18.1			1	4
4858.0	4866.0	D	51.4	195	1.2	255	308	20.9	20.1		10.2		17.0	1	2
4860.0	4868.0	D	50.0	261	1.3	258	305	20.6	20.1	-.2	17.7			2	1
4862.0	4870.0	C	50.5	68	1.3	260	301	20.2	20.2		14.0		-2.4	1	2
4864.0	4872.0	D	51.3	250	1.3	261	296	20.2	20.3	.5	19.2			2	1
4866.0	4874.0	C	48.3	36	1.2	259	289	20.2	20.4	-7.7			-13.7	2	4
4868.0	4876.0	C	52.4	33	1.1	259	283	20.5	21.0	-8.0			-16.9	2	4
4872.0	4880.0	D	66.4	247	.8	259	269	21.5	21.0	-14.4	18.7			2	1
4874.0	4882.0	C	45.5	201	.8	264	262	21.3	20.7		18.5		14.7	2	3
4876.0	4884.0	C	61.7	255	.8	270	257	20.9	20.8	-20.5			-19.5	1	3
4878.0	4886.0	C	58.4	262	.8	275	253	20.6	20.8	-14.2			-19.8	1	3
4880.0	4888.0	C	44.9	91	.8	280	248	20.8	20.6	13.2	7.8			2	1
4882.0	4890.0	C	65.3	342	.8	283	244	20.7	20.4		6.4		-19.1	1	2
4884.0	4892.0	B	46.6	130	.8	287	239	20.5	20.4	13.6	19.9	-6.8		2	0
4886.0	4894.0	C	56.2	69	.8	290	236	20.2	20.4	10.9			17.7	1	3
4888.0	4896.0	D	49.2	305	.8	294	232	20.0	20.4	8.2	-7.0			1	4
4890.0	4898.0	C	66.9	70	.9	296	229	19.9	20.7		17.3		-12.5	2	3
4892.0	4900.0	D	54.2	329	.9	298	226	19.9	21.2		6.3		-11.6	1	2
4894.0	4902.0	D	53.5	79	1.0	299	223	19.9	21.2	18.7	16.2			2	1
4896.0	4904.0	C	52.9	76	1.1	299	220	19.9	21.0	18.2	15.7			2	1
4898.0	4906.0	D	47.0	122	1.2	301	216	19.9	20.3		1.4		11.1	1	2
4904.0	4912.0	C	57.6	298	1.3	307	204	19.8	20.2	-15.3			-18.0	2	4
4906.0	4914.0	D	46.2	270	1.3	307	201	19.8	20.0	-13.8			-6.6	2	4
4912.0	4920.0	D	66.9	28	1.4	311	193	19.8	20.0		12.4		-16.6	2	3
4918.0	4926.0	D	40.0	17	1.5	311	188	19.7	19.6		16.7		9.4	1	2
4920.0	4928.0	D	41.8	13	1.5	311	188	19.6	19.6		17.9		9.6	1	2
4922.0	4930.0	D	41.4	15	1.5	311	187	19.5	19.6		17.6		9.7	1	2
4924.0	4932.0	D	54.7	187	1.5	311	187	19.5	19.5	-13.5			13.1	2	4
4926.0	4934.0	D	55.9	192	1.5	311	187	19.5	19.4	-15.4			12.5	2	4
4928.0	4936.0	D	13.1	261	1.5	311	187	19.5	19.3	-2.9			-1.9	2	4
4930.0	4938.0	D	72.3	167	1.5	311	187	19.5	19.1	-17.2	19.0			2	1
4932.0	4940.0	C	69.4	172	1.5	311	188	19.5	19.1	-17.1	12.8			2	1
4934.0	4942.0	C	69.6	171	1.5	311	188	19.5	19.1	-16.9	13.5			2	1
4936.0	4944.0	B	66.9	174	1.5	311	187	19.5	19.0	-16.6	9.1			2	1
4938.0	4946.0	D	70.0	166	1.6	311	185	19.6	19.1	-15.8	15.9			2	1
4944.0	4952.0	C	52.0	40	1.6	311	176	19.8	19.3	17.7	16.7			2	1
4946.0	4954.0	C	68.8	95	1.6	311	173	19.9	19.4		-9.2		18.4	1	2
4948.0	4956.0	C	52.9	36	1.6	310	171	20.0	19.6	.6			18.6	1	3

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL	CORR. GRADE		DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
4950.0	4958.0	C	49.6	124	1.5	310	169	20.0	19.8	-15.7			-.2	1	3
4952.0	4960.0	D	21.1	200	1.6	310	167	20.1	20.0	-.7			-5.3	1	3
4954.0	4962.0	D	43.9	35	1.6	310	165	20.2	20.1	-.7			13.8	1	3
4956.0	4964.0	D	27.9	349	1.7	312	162	20.3	20.2	5.1			6.2	1	3
4958.0	4966.0	C	50.8	342	1.7	312	158	20.4	20.3	12.5			13.8	1	3
4960.0	4968.0	D	41.1	64	1.7	311	154	20.5	20.4	9.0	17.4			2	1
4962.0	4970.0	C	50.4	98	1.7	310	150	20.6	20.6	2.3	18.9			2	1
4964.0	4972.0	C	55.4	98	1.7	309	146	20.7	20.6	1.5			20.1	2	4
4966.0	4974.0	B	16.0	137	1.7	309	142	20.8	20.7	-2.4			2.9	2	4
4968.0	4976.0	B	42.1	279	1.7	308	139	20.9	20.8	1.6			-13.9	2	4
4970.0	4978.0	C	46.0	296	1.8	309	135	20.9	20.9		-7.2		-14.5	2	3
4972.0	4980.0	C	41.4	162	1.8	309	132	21.0	20.9	-2.9	-15.0			1	4
4974.0	4982.0	C	54.5	301	1.8	309	128	21.0	20.9	17.5			13.7	1	3
4976.0	4984.0	C	12.4	190	1.8	308	124	21.1	20.9	1.5			-2.7	1	3
4978.0	4986.0	C	54.1	166	1.9	306	120	21.1	21.2	.8			-19.6	1	3
4980.0	4988.0	C	36.0	185	1.9	304	114	21.1	21.3	-9.3			-5.0	2	4
4982.0	4990.0	C	50.4	107	1.9	302	109	21.3	21.7	-11.4	1.2			2	1
4984.0	4992.0	B	37.9	67	1.9	299	103	21.5	21.6	-1.4	9.8			2	1
4986.0	4994.0	C	41.8	350	2.0	297	97	21.7	21.8	12.9			6.4	2	4
4988.0	4996.0	C	35.3	330	2.0	294	91	21.7	21.9	-2.5	8.8			1	4
4990.0	4998.0	C	40.2	315	2.0	292	86	21.8	21.4	13.7			.7	2	4
4992.0	5000.0	C	26.4	302	2.0	290	81	21.4	21.2	8.1			-.6	2	4
4998.0	5006.0	C	32.6	274	2.1	284	65	20.1	20.2	9.5			-2.6	2	4
5000.0	5008.0	C	55.6	322	2.1	283	59	19.9	20.2	-13.5	4.0			1	4
5004.0	5012.0	D	43.3	351	2.1	279	46	20.2	20.1		16.2		13.5	2	3
5008.0	5016.0	D	60.0	320	2.1	276	32	20.3	20.8		-10.1		18.3	1	2
5010.0	5018.0	C	58.6	182	2.1	271	19	20.3	21.0	11.2	-9.6			2	1
5012.0	5020.0	C	54.1	177	1.9	267	11	21.9	20.5	11.6	-6.4			2	1
5014.0	5022.0	C	53.2	166	1.9	266	2	23.4	20.0	11.7	-6.5			2	1
5016.0	5024.0	C	53.9	155	1.8	260	350	22.4	20.2	11.6	-6.3			2	1
5018.0	5026.0	C	42.9	124	1.6	251	339	20.5	20.1	12.6			2.7	1	3
5020.0	5028.0	C	28.3	286	1.4	245	332	19.9	20.1	-7.9			.4	1	3
5022.0	5030.0	C	57.7	138	1.3	242	326	19.9	20.1	13.5	-3.9			2	1
5024.0	5032.0	C	54.0	56	1.2	238	321	20.0	20.2		2.3		-12.1	1	2
5026.0	5034.0	C	53.2	48	1.1	234	315	20.0	20.4		1.1		-12.5	1	2
5030.0	5038.0	D	42.1	347	.9	229	305	19.8	20.3		-13.5		-12.6	1	2
5032.0	5040.0	D	39.0	338	.8	222	300	19.8	20.1		-12.7		-11.1	1	2
5034.0	5042.0	D	38.5	330	.8	224	295	19.9	20.1		-13.0		-10.9	1	2
5036.0	5044.0	C	57.7	124	.7	225	290	19.9	20.1	19.3	8.4			2	1
5038.0	5046.0	C	37.6	354	.7	226	286	19.9	20.1		-5.6		-9.9	1	2
5040.0	5048.0	C	54.9	201	.6	221	282	19.9	20.1	-16.8	-4.9			1	4
5042.0	5050.0	C	60.2	184	.6	217	277	19.9	20.1	-16.7			19.0	1	3
5044.0	5052.0	C	59.7	179	.5	219	272	19.9	20.1	-16.5			18.4	1	3
5046.0	5054.0	C	57.4	176	.5	218	267	19.9	20.1	-15.6			16.3	1	3
5048.0	5056.0	C	53.9	177	.4	220	262	19.9	20.1	12.7			15.1	2	4
5050.0	5058.0	C	52.2	170	.3	224	258	19.9	20.1	12.7			13.5	2	4
5052.0	5060.0	C	56.0	149	.3	233	254	19.9	20.2	18.3			10.8	2	4
5054.0	5062.0	C	69.1	53	.3	243	251	19.9	20.2	16.6	-15.9			2	1
5056.0	5064.0	D	69.2	50	.3	254	247	19.9	20.3	16.7	-15.9			2	1
5058.0	5066.0	D	64.0	345	.3	271	243	19.9	20.3		8.9		-16.0	1	2
5060.0	5068.0	C	47.6	334	.2	288	239	20.0	20.3	-10.3			-12.1	2	4
5062.0	5070.0	C	48.5	340	.2	302	234	20.0	20.4	14.1	6.0			1	4
5064.0	5072.0	C	34.3	335	.2	302	229	20.0	20.4	8.6	3.8			1	4
5066.0	5074.0	C	38.1	44	.3	303	223	20.0	20.4	8.4	15.7	.1		1	0
5068.0	5076.0	D	44.8	297	.3	310	217	20.1	20.5	8.[illegible]	-3.4			1	4

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL	CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
5070.0	5078.0	D 42.5	35	.4	316	211	20.2	20.6		1.2		-8.6	2	3
5072.0	5080.0	D 49.9	39	.4	325	205	20.3	20.8		5.9		-8.8	2	3
5074.0	5082.0	D 36.4	240	.4	327	199	20.5	21.0	-.5	-11.4			1	4
5076.0	5084.0	D 52.6	65	.5	335	194	20.8	21.3	-2.1	17.3			1	4
5078.0	5086.0	C 54.7	67	.5	339	190	21.0	21.7		16.2		20.9	1	2
5080.0	5088.0	B 36.6	306	.6	342	186	21.3	22.0		8.3		-3.0	1	2
5082.0	5090.0	B 27.1	255	.6	342	181	21.6	22.4	4.1			-7.0	1	3
5084.0	5092.0	B 27.5	215	.7	342	177	21.9	22.7	-.6			-8.0	1	3
5086.0	5094.0	B 35.0	200	.7	342	171	22.3	23.1	-2.8			-10.5	1	3
5088.0	5096.0	C 39.7	243	.7	341	166	22.8	23.5	7.5	-4.0			1	4
5090.0	5098.0	B 24.0	310	.7	339	163	23.6	23.6	7.4			1.8	1	3
5092.0	5100.0	C 38.3	333	.7	337	158	24.4	23.8		-1.7		-10.7	2	3
5094.0	5102.0	C 38.2	307	.7	334	154	25.1	23.8	13.3			4.8	1	3
5096.0	5104.0	C 35.2	243	.8	331	150	25.1	23.9	9.1			-7.7	1	3
5098.0	5106.0	B 13.7	350	.8	329	146	24.8	24.1	4.2			-1.7	2	4
5100.0	5108.0	A 39.1	291	.8	328	143	24.6	24.6	2.9	-10.7	-17.5		2	0
5106.0	5114.0	C 43.6	84	1.0	327	139	25.4	25.8	3.4			16.8	2	4
5108.0	5116.0	C 19.7	31	1.0	328	139	25.6	25.9	6.1			2.9	2	4
5110.0	5118.0	D 57.3	321	1.1	330	140	25.6	26.1	21.4			-20.2	2	4
5112.0	5120.0	D 58.2	52	1.1	330	141	25.6	26.1	-21.4			20.9	1	3
5114.0	5122.0	C 58.1	52	1.2	329	141	25.6	26.1		-.2		21.0	1	2
5116.0	5124.0	C 46.9	44	1.3	327	139	25.6	26.1		3.0		15.5	1	2
5118.0	5126.0	C 56.6	299	1.4	323	136	25.7	26.2		-11.4		-25.4	2	3
5120.0	5128.0	D 33.8	230	1.5	318	130	25.8	26.2	-6.9	-17.2			2	1
5124.0	5132.0	D 54.9	165	1.7	311	120	25.7	26.1	-24.8	-25.5			2	1
5126.0	5134.0	D 70.7	43	1.7	307	115	25.7	25.9		-21.0		24.5	1	2
5128.0	5136.0	D 57.1	282	1.7	303	112	25.6	25.7	24.3			17.1	1	3
5130.0	5138.0	C 46.8	187	1.8	299	108	25.4	25.6	10.9			-15.3	1	3
5132.0	5140.0	B 50.9	322	1.8	293	102	25.2	24.9	23.0			-2.7	2	4
5134.0	5142.0	B 23.8	288	1.9	289	96	24.3	24.3	7.0			-4.4	2	4
5136.0	5144.0	B 30.9	259	2.0	285	88	23.2	23.4	6.4			-8.4	2	4
5138.0	5146.0	C 64.5	277	2.0	282	81	22.4	22.5		14.1		-17.7	2	3
5140.0	5148.0	C 14.5	339	2.0	280	74	21.6	22.1	3.6	6.1			2	1
5142.0	5150.0	D 61.2	97	2.0	279	68	21.2	21.7		-17.6		6.8	2	3
5144.0	5152.0	C 32.5	332	2.0	277	61	20.9	21.4	7.4			6.9	2	4
5146.0	5154.0	C 47.7	75	2.0	276	55	20.6	21.2	-13.6			6.3	2	4
5148.0	5156.0	D 54.1	342	2.0	275	48	20.4	21.2	8.6			19.4	2	4
5150.0	5158.0	C 37.2	264	2.1	274	41	20.4	21.3		12.0		12.1	1	2
5160.0	5168.0	C 26.0	39	1.5	243	338	19.6	19.9	1.8			-6.2	1	3
5162.0	5170.0	D 28.1	25	1.4	237	327	19.5	20.0	1.4			-7.0	1	3
5164.0	5172.0	D 25.6	15	1.2	230	316	19.4	19.9	1.4			-6.2	1	3
5166.0	5174.0	C 28.4	360	1.1	221	305	19.3	19.8	1.2			-7.2	1	3
5168.0	5176.0	D 58.4	16	.9	214	295	19.3	19.5	12.6	-5.1			1	4
5170.0	5178.0	D 58.2	8	.7	208	288	19.2	19.5	12.5	-5.1			1	4
5176.0	5184.0	D 45.6	270	.5	207	270	19.4	19.5	-9.8	.4			2	1
5178.0	5186.0	C 50.4	252	.4	202	266	19.4	19.5	-8.5	5.9			2	1
5180.0	5188.0	C 45.6	276	.3	184	260	19.4	19.5		-5.4		6.8	2	3
5182.0	5190.0	D 45.6	354	.3	171	255	19.4	19.5	-8.2	-19.4			2	1
5184.0	5192.0	D 61.4	184	.3	117	251	19.5	19.5		-14.0		9.5	1	2
5188.0	5196.0	C 61.0	224	.2	355	241	19.5	19.5	-11.4	10.6			2	1
5190.0	5198.0	C 41.2	198	.2	355	237	19.5	19.6	-1.2	10.8			2	1
5192.0	5200.0	C 11.7	189	.2	355	231	19.5	19.6	-.1	2.7			2	1
5194.0	5202.0	B 56.1	38	.2	355	225	19.5	19.7	12.6	-3.8			2	1
5196.0	5204.0	B 56.3	34	.2	355	220	19.5	19.7	13.0	-3.2			2	1
5198.0	5206.0	C 49.6	17	.2	355	215	19.5	19.7	7.4			-14.6	2	4

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
5206.0	5214.0	D	66.6	265	.4	346	198	19.5	19.7	12.5	-17.2			1	4
5226.0	5234.0	C	64.9	169	.8	322	176	19.3	19.2	-17.5	4.8			2	1
5228.0	5236.0	D	71.0	156	.8	325	174	19.5	19.3	-17.6	16.4			2	1
5230.0	5238.0	C	64.7	280	.8	326	172	19.6	19.5		13.6		-13.2	1	2
5232.0	5240.0	C	64.4	277	.8	328	169	19.7	19.6		13.0		-13.3	1	2
5236.0	5244.0	C	53.3	101	.9	326	163	20.4	20.2	-17.9			5.7	1	3
5238.0	5246.0	C	45.5	57	.9	324	159	20.6	20.7		20.5		7.8	2	3
5248.0	5256.0	C	57.7	291	1.0	312	143	19.9	19.4	5.2	-17.2			2	1
5250.0	5258.0	C	61.2	64	1.1	312	142	19.7	19.3		-7.1		13.3	1	2
5252.0	5260.0	C	50.6	304	1.2	312	140	19.1	19.2	15.2			8.2	1	3
5254.0	5262.0	C	48.5	268	1.3	312	139	19.0	19.2	15.7			-1.4	1	3
5256.0	5264.0	B	56.0	257	1.3	311	137	19.0	19.2		14.7		-5.3	1	2
5258.0	5266.0	B	57.4	300	1.3	310	136	18.9	19.2	10.7	-8.4			2	1
5262.0	5270.0	C	68.7	292	1.4	308	133	18.8	19.1	14.9	-18.5			2	1
5264.0	5272.0	D	65.3	51	1.4	308	132	18.7	19.1		-6.0		17.3	1	2
5266.0	5274.0	D	65.5	63	1.4	307	131	18.7	19.1		-14.5		11.7	1	2
5268.0	5276.0	C	65.6	67	1.3	307	130	18.7	19.0		-18.2		9.0	1	2
5274.0	5282.0	D	58.3	36	1.1	304	124	18.5	18.8	14.9			15.5	2	4
5276.0	5284.0	C	54.8	10	1.2	304	122	18.5	18.8	-7.3			17.7	1	3
5278.0	5286.0	C	50.0	22	1.2	304	121	18.5	18.7	13.1			9.2	2	4
5280.0	5288.0	C	66.1	281	1.3	302	119	18.6	18.8	14.3	-13.5			2	1
5282.0	5290.0	B	64.5	278	1.3	300	117	18.6	18.8	12.8	-13.4			2	1
5284.0	5292.0	D	54.0	127	1.3	299	115	18.6	18.9		-5.1		9.4	2	3
5286.0	5294.0	B	23.1	223	1.2	300	113	18.7	19.1	5.4			-2.3	1	3
5288.0	5296.0	C	35.1	149	1.2	300	110	18.8	19.3	-.7			-9.0	1	3
5290.0	5298.0	D	57.0	283	1.2	300	107	18.9	19.5	14.2	-2.1			2	1
5292.0	5300.0	B	54.8	273	1.2	302	104	19.1	19.6	4.8	-2.5	-13.6		2	0
5294.0	5302.0	C	47.1	315	1.3	300	101	19.2	19.8	15.0	12.1			2	1
5298.0	5306.0	D	49.7	308	1.3	298	97	19.2	19.3	16.4	12.8			2	1
5310.0	5318.0	C	70.4	287	1.4	294	89	19.2	19.7		18.6		-18.3	2	3
5312.0	5320.0	C	55.4	277	1.3	296	88	19.5	19.9	12.2			17.0	1	3
5314.0	5322.0	C	50.4	61	1.3	299	88	19.6	20.2	-15.8			-4.5	1	3
5316.0	5324.0	D	54.1	6	1.4	300	89	19.8	20.3	-15.8			12.7	1	3
5322.0	5330.0	D	44.7	174	1.3	298	89	19.5	19.8	-10.2			-8.8	2	4
5324.0	5332.0	C	58.5	170	1.3	296	88	19.4	20.0	13.8	-3.8			1	4
5326.0	5334.0	C	59.4	170	1.3	297	87	19.3	20.5	14.9	-3.7			1	4
5328.0	5336.0	C	53.5	166	1.3	295	87	19.5	20.5		-4.3		-15.5	1	2
5330.0	5338.0	C	56.0	157	1.4	294	87	19.4	21.6		-9.0		-19.1	1	2
5332.0	5340.0	C	57.5	152	1.3	296	86	19.7	22.0	9.1	-12.1			1	4
5334.0	5342.0	C	63.9	146	1.3	295	86	20.2	22.0	9.1	-19.2			1	4
5336.0	5344.0	C	47.9	145	1.3	296	85	19.9	23.9	-16.2			-5.9	2	4
5338.0	5346.0	D	59.0	132	1.3	296	82	20.2	26.2	5.6	-20.6			1	4
5354.0	5362.0	D	51.3	243	1.1	276	65	26.2	25.7	16.4			-17.4	2	4
5356.0	5364.0	C	50.6	293	1.3	281	63	24.2	24.0	21.7			1.7	2	4
5358.0	5366.0	B	18.4	293	1.4	283	60	22.1	21.0	5.4			.6	2	4
5360.0	5368.0	B	10.4	264	1.3	285	56	20.2	19.2	2.8			-.8	2	4
5362.0	5370.0	B	11.9	31	1.5	282	53	19.4	19.6	-.7	2.0			2	1
5364.0	5372.0	D	44.5	33	1.4	280	51	19.2	19.4	-11.8	-17.6			1	4
5370.0	5378.0	C	68.3	300	1.6	279	48	19.0	19.2	-16.7	16.2			1	4
5372.0	5380.0	C	69.9	300	1.6	280	47	19.0	19.3	-18.9	16.9			1	4
5376.0	5384.0	D	46.0	191	1.5	277	45	19.0	19.3	13.7	16.8			1	4
5378.0	5386.0	C	46.9	348	1.3	274	43	19.0	19.3	2.9			14.4	2	4
5380.0	5388.0	C	49.6	327	1.0	263	40	19.1	19.3	-14.3			7.8	1	3
5382.0	5390.0	C	68.1	286	1.0	260	37	19.1	19.3	-14.1	18.6			1	4
5384.0	5392.0	D	31.2	274	.9	253	34	19.1	19.2		6.1		8.2	1	2

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
5386.0	5394.0	D	23.0	223	.9	249	31	19.1	19.2		8.2		5.0	1	2
5388.0	5396.0	D	22.1	183	.9	259	29	19.0	19.2		7.2		2.0	1	2
5390.0	5398.0	D	54.7	297	.9	264	27	18.9	19.1	14.0			13.7	2	4
5392.0	5400.0	C	45.0	294	.9	272	26	18.8	19.1	10.3			9.4	2	4
5394.0	5402.0	D	51.5	291	.9	279	24	18.7	19.1		1.6		13.2	1	2
5396.0	5404.0	C	54.6	291	.9	276	22	18.7	19.1		.9		14.4	1	2
5404.0	5412.0	C	48.2	307	.8	254	15	18.5	18.9		-7.7		6.1	1	2
5406.0	5414.0	C	58.3	276	.9	266	14	18.3	18.7	17.7			13.4	2	4
5408.0	5416.0	C	48.6	228	.9	263	13	18.3	18.5	15.0			-2.3	2	4

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AMOCO PRODUCTION CO ANSCHUTZ RANCH EAST W30-13 ANSCHUTZ RANCH SUMMIT, UT 8X2X80

CORRELATION INTERVAL		CORR. GRADE	DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
5196.0	5204.0	C	28.6	159	1.0	317	152	19.5	19.7		-10.1		-5.7	1	2
5198.0	5206.0	D	38.1	128	1.0	314	147	19.5	19.7		-14.0		-4.6	1	2
5202.0	5210.0	D	66.0	294	1.1	310	137	19.5	19.6	11.9	-18.5			2	1
5206.0	5214.0	C	64.5	288	1.2	307	129	19.5	19.7	12.1	-15.8			2	1
5208.0	5216.0	C	69.1	289	1.2	305	126	19.4	19.6	18.1	-15.6			2	1
5210.0	5218.0	D	68.1	54	1.3	303	123	19.3	19.5		-16.3		14.2	1	2
5212.0	5220.0	C	67.1	51	1.3	301	120	19.2	19.5		-15.4		13.5	1	2
5214.0	5222.0	B	63.4	46	1.4	299	117	19.1	19.3		-11.8		12.2	1	2
5216.0	5224.0	B	64.3	45	1.4	298	115	19.1	19.2		-12.6		12.3	1	2
5218.0	5226.0	C	62.8	45	1.4	298	113	19.1	19.1		-12.8		10.7	1	2
5220.0	5228.0	D	25.2	298	1.4	297	112	19.1	19.1		1.1		-4.2	2	3
5222.0	5230.0	C	3.7	37	1.4	297	110	19.1	19.1		1.2		.6	2	3
5224.0	5232.0	D	39.1	333	1.4	296	109	19.2	19.1	.4	11.8			1	4
5228.0	5236.0	C	61.0	296	1.4	295	106	19.4	19.3		6.3		-15.2	2	3
5230.0	5238.0	C	44.4	299	1.4	293	104	19.6	19.4	7.2			12.2	1	3
5232.0	5240.0	C	41.1	302	1.3	291	102	19.7	19.5	11.5	6.0			2	1
5234.0	5242.0	D	39.3	328	1.3	289	99	20.0	19.7	11.9	12.4			2	1
5236.0	5244.0	C	56.3	164	1.3	288	96	20.3	20.2	8.3	-10.8			1	4
5238.0	5246.0	D	35.3	173	1.3	286	92	20.5	20.6	-8.1			-6.1	2	4
5240.0	5248.0	C	64.6	150	1.3	284	89	20.4	20.7	8.5	-19.7			1	4
5248.0	5256.0	C	51.9	19	1.5	285	79	19.8	19.5	-16.9			4.9	1	3
5250.0	5258.0	C	45.4	146	1.5	284	78	19.7	19.3	-12.2			-5.4	2	4
5252.0	5260.0	C	51.8	130	1.5	282	76	19.3	19.2	-16.3			-2.8	2	4
5254.0	5262.0	C	21.1	334	1.5	283	74	19.0	19.2	4.7			2.9	2	4
5256.0	5264.0	C	46.3	318	1.5	280	72	19.0	19.2	-5.1			13.9	1	3
5258.0	5266.0	D	32.0	41	1.5	279	70	18.9	19.2		8.2		8.0	2	3
5260.0	5268.0	D	30.9	3	1.5	278	69	18.8	19.2	-7.3			3.3	1	3
5264.0	5272.0	C	41.3	82	1.6	280	66	18.7	19.1	-5.4	-15.0			1	4
5274.0	5282.0	D	54.1	267	1.4	271	59	18.5	18.9		15.0		-5.4	2	3
5276.0	5284.0	C	56.0	101	1.4	269	57	18.5	18.8	-.1			-18.6	1	3
5278.0	5286.0	C	26.7	345	1.4	269	56	18.5	18.8	-5.9	-2.7			1	4
5280.0	5288.0	C	64.1	332	1.5	271	54	18.5	18.8		-4.7		17.5	1	2
5286.0	5294.0	C	52.4	271	1.4	267	49	18.7	19.0		17.4		-.8	2	3
5288.0	5296.0	B	27.0	243	1.4	262	47	18.8	19.2	6.4			-3.3	2	4
5290.0	5298.0	C	17.0	282	1.4	258	44	18.9	19.5		3.5		4.4	1	2
5292.0	5300.0	C	56.5	339	1.3	255	42	19.1	19.6		-12.8		7.1	1	2
5294.0	5302.0	C	55.0	158	1.4	257	40	19.2	19.6		13.3		-5.5	1	2
5302.0	5310.0	C	66.9	286	1.3	258	33	19.0	19.4	-16.4	13.3			1	4
5310.0	5318.0	C	65.1	287	1.2	258	25	19.2	19.7	-18.9	6.3			1	4
5312.0	5320.0	C	49.0	281	1.2	262	24	19.4	19.9	14.3			8.8	2	4
5314.0	5322.0	C	43.6	279	1.3	263	25	19.6	20.2		5.3		12.3	1	2
5316.0	5324.0	C	12.5	7	1.2	263	24	19.8	20.3	-2.0	1.8	4.0		2	0
5318.0	5326.0	C	17.0	343	1.3	261	23	19.7	20.1		-4.4		.0	1	2
5320.0	5328.0	D	7.8	226	1.3	258	21	19.4	20.2	2.1			-.5	2	4
5330.0	5338.0	B	68.3	294	1.0	235	6	19.6	21.9		-15.2		19.3	1	2
5332.0	5340.0	B	67.3	296	1.0	238	6	20.2	22.8		-16.3		18.3	1	2
5334.0	5342.0	C	71.1	79	1.1	245	7	20.4	22.4	20.6	-17.3			1	4
5336.0	5344.0	C	69.0	297	1.1	248	8	20.1	24.0		-17.4		22.1	1	2
5338.0	5346.0	D	66.3	179	1.1	249	5	19.8	28.9	19.5	-6.7			2	1
5340.0	5348.0	C	65.4	291	1.0	238	1	22.7	31.7		-17.0		25.0	1	2
5342.0	5350.0	C	66.1	290	.9	224	357	24.9	31.8		-21.5		23.1	1	2
5344.0	5352.0	B	67.7	292	.8	212	354	23.6	32.3		-27.2		21.5	1	2
5350.0	5358.0	C	67.5	136	1.0	201	339	27.5	28.9	17.7	-27.3			2	1
5358.0	5366.0	B	62.7	281	.5	207	289	20.0	18.7	-16.4	5.8			2	1
5360.0	5368.0	B	54.7	268	.5	174	277	19.4	19.6		4.9		15.9	2	3

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CORRELATION INTERVAL	CORR. GRADE		DIP ANG.	DIP AZ.	DRFT ANG.	DRFT AZ.	AZ. NO.1	DIA 13	DIA 24	DISPLACEMENTS HBL	HBO	HLR	HBR	BASE ARM	M
5362.0	5370.0	B	45.6	263	.3	175	269	19.4	19.6	-11.0			-8.6	1	3
5364.0	5372.0	B	52.2	264	.4	193	267	19.2	19.4	-13.1			-11.8	1	3
5368.0	5376.0	D	62.1	277	.2	153	263	19.0	19.2		-8.1		13.3	2	3
5370.0	5378.0	D	59.9	172	.1	102	261	19.0	19.3		-.3		16.6	1	2
5372.0	5380.0	D	58.7	183	.1	97	260	19.1	19.3		-7.0		12.0	1	2
5374.0	5382.0	C	49.4	168	.1	97	258	19.0	19.2		.0		11.2	1	2
5376.0	5384.0	C	71.7	275	.2	97	256	19.0	19.2		-18.6		17.6	2	3
5378.0	5386.0	D	49.6	219	.2	97	255	19.0	19.3	-2.4	13.3	18.0		2	0
5380.0	5388.0	D	52.0	217	.5	94	253	19.2	19.4	-17.1			-2.5	1	3
5382.0	5390.0	D	45.9	36	.7	83	249	19.2	19.3		-11.0		-14.0	2	3
5384.0	5392.0	C	51.2	216	.8	75	246	19.1	19.2		11.8		15.9	2	3
5386.0	5394.0	C	53.8	236	.7	68	245	19.1	19.1	-14.5			-10.6	1	3
5388.0	5396.0	C	40.6	158	.6	70	245	19.0	19.2	7.9			8.5	2	4
5390.0	5398.0	B	14.4	202	.5	74	245	18.8	19.2		-3.4		.0	1	2
5392.0	5400.0	B	20.2	200	.4	86	244	18.7	19.1		-4.8		.0	1	2
5394.0	5402.0	B	4.2	21	.4	120	243	18.6	19.1	1.0			.1	1	3
5396.0	5404.0	D	27.2	206	.5	105	241	18.8	19.2	-6.8			-1.0	1	3
5408.0	5416.0	C	23.0	228	.6	38	233	18.3	18.6	-3.4			4.1	2	4

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