

**NOTATIONS**

Recorded in NID File ..... ✓  
Location Map Pinned ..... ✓  
Card Indexed ..... ✓

Checked by Chief .....  
Approval Letter .....  
Disapproval Letter .....

**COMPLETION DATA:**

Well Completed 10-19-78  
.....  
..... TA.....  
51 GW..... OS..... PA.....

Location Inspected .....  
Bond released  
State or Fee Land .....

**LOGS FILED**

Driller's Log..... ✓  
Electric Logs (No.) ..... ✓  
E..... I..... Dual I Lat..... GR-N..... Micro.....  
BHC Sonic GR..... Lat..... MI-L.....  
.....

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY**

**APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK**

1a. TYPE OF WORK  
 DRILL  DEEPEN  PLUG BACK

b. TYPE OF WELL  
 OIL WELL  GAS WELL  OTHER  SINGLE ZONE  MULTIPLE ZONE

2. NAME OF OPERATOR  
 The Anschutz Corporation

3. ADDRESS OF OPERATOR  
 1110 Denver Club Building, Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
 At surface 1994' FEL & 1947' FSL Sec. 34-4N-7E  
 At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 20 miles southwest of Evanston, Wyoming

16. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any)

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.

19. PROPOSED DEPTH  
 9,000'

20. ROTARY OR CABLE TOOLS  
 Rotary

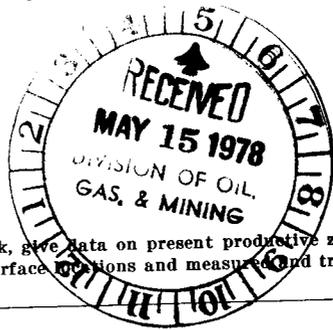
21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 7722' GL

22. APPROX. DATE WORK WILL START\*  
 5-19-78

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2	13-3/8	48#	1,500'	1000 sx (Circulated)
12-1/4	7	23-23	9,000'	

We propose to drill this well to an approximate total depth of 9,000' to test the Nugget formation. Mud and BOP programs will be those generally used in this area. Electric logs will be run to total depth (DIL-GR density and neutron logs). No cores are planned at this time; drill stem tests will be run as warranted. If production is encountered, casing will be set through the indicated pay section and selectively perforated; fracing or acidizing may be necessary to stimulate production. Blanket band is on file. Survey plats are attached.



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 conditions and measurements and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Wayne C. Pierce TITLE Operations Manager DATE 5-10-78  
 (This space for Federal or State office use)

PERMIT NO. 43-043-30076 APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

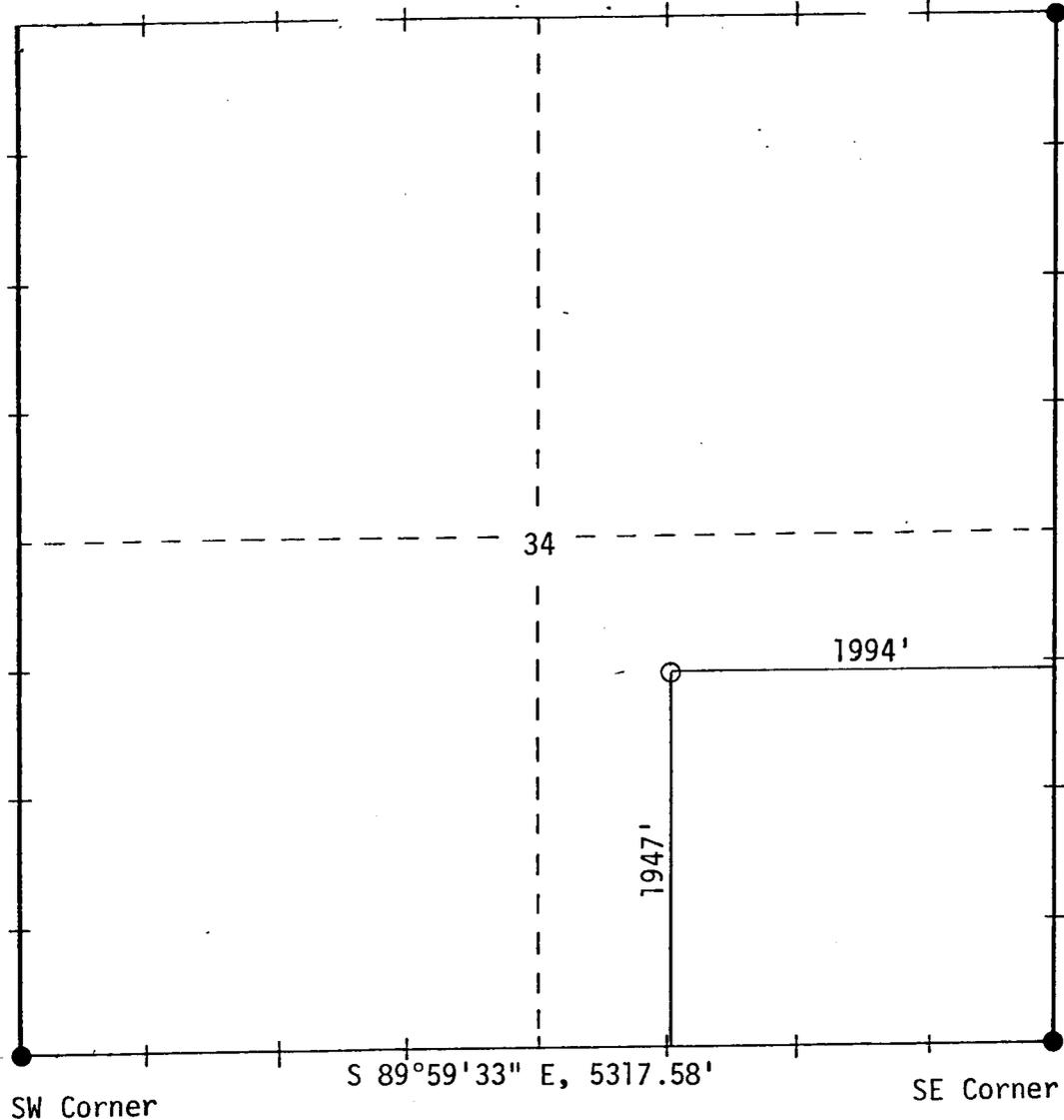
CONDITIONS OF APPROVAL, IF ANY:

NW Corner

T 4 N

R 7 E

NE Corner



N 0°22'54" W, 5192.38'

SCALE: 1" = 1000'

- Found Brass Cap
- Found Stone
- ⊙ Set Brass Cap
- ⊗ Found Stone - Set Brass Cap
- Hub and Tack

I, John A. Proffit of Evanston, Wyoming certify that in accordance with a request from Mark Wells of Evanston, Wyoming for Ansuetz Corp. I made a survey on the 24th day of April, 1978 for Location and Elevation of the \_\_\_\_\_ as shown on the above map, the wellsite is in the NW¼SE¼ of Section 34, Township 4 N, Range 7 E of the Salt Lake Base & Merid., Summit County, State of Utah, Elevation is 7766 Feet top of spike Datum U.S.G.S. Quadrangle - Castle Rock, Utah - Spot Elev. 7722' in the SW¼SE¼, Sec. 34, T4N, R7E, S.L.B. & M.

Reference point	North 299.96'	5/8" rebar	Elev. top of bar	7761.56'
Reference point	East 299.91'	"	"	7781.58'
Reference point	South 299.98'	"	"	7705.11'
Reference point	West 217.50'	"	"	7708.85'

*John A. Proffit* 5/3/78  
 JOHN A. PROFFIT UTAH R.L.S. NO. 2860

DATE: 4/28/78  
 JOB NO.: 78-59

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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

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 At proposed prod. zone

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24. SIGNED Wayne C. Pierce TITLE Operations Manager DATE 5-10-78  
 (This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

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APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

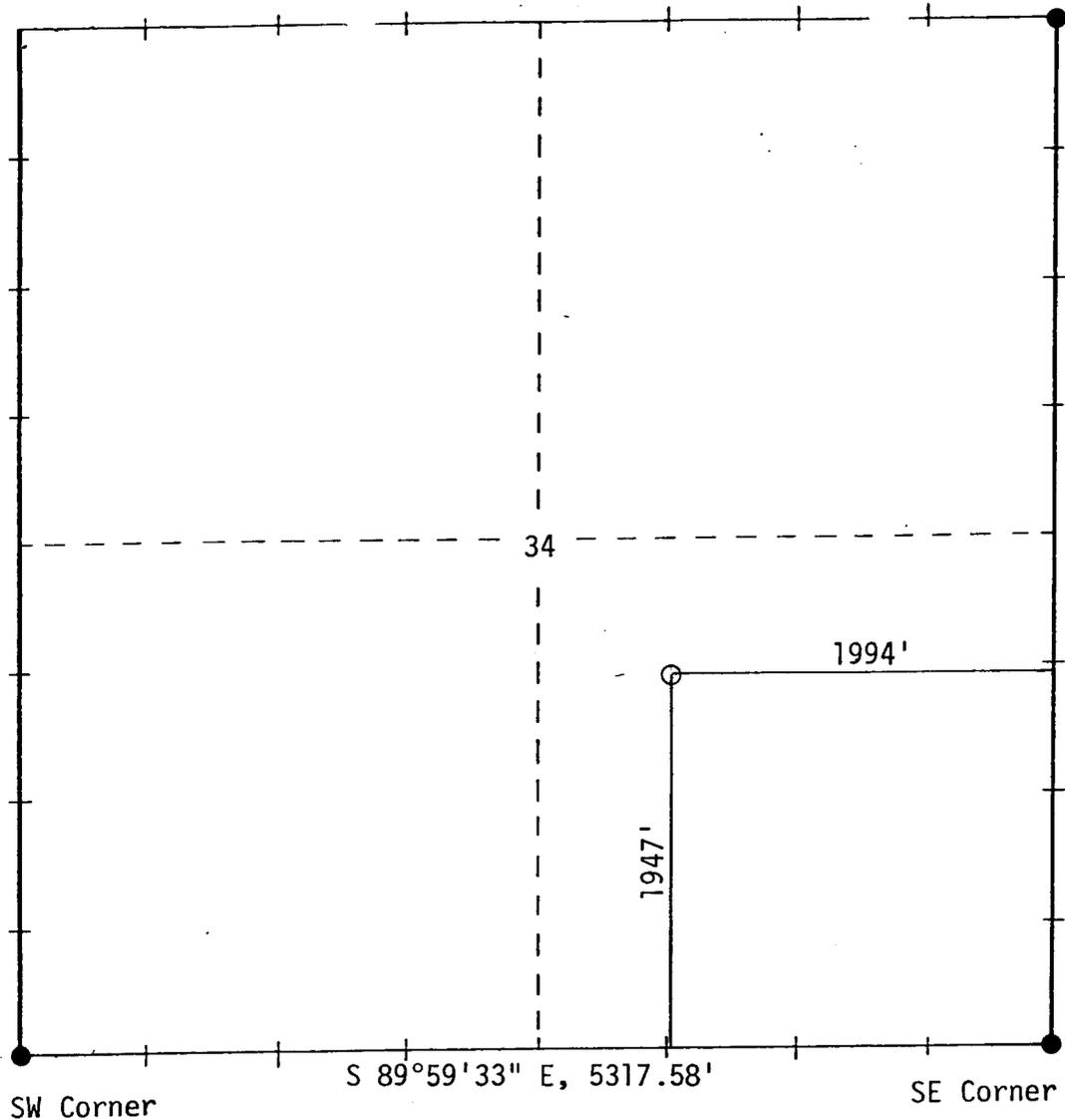
CONDITIONS OF APPROVAL, IF ANY:

NW Corner

T 4 N

R 7 E

NE Corner



N 0°22'54" W, 5192.38'

SCALE: 1" = 1000'

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Reference point	North 299.96'	5/8" rebar	Elev. top of bar	7761.56'
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*John A. Proffit* 5/3/78  
 JOHN A. PROFFIT UTAH R.L.S. NO. 2860

DATE: 4/28/78  
 JOB NO.: 78-59

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



1110 DENVER CLUB BUILDING  
518 SEVENTEENTH STREET  
DENVER, COLORADO 80202  
TELEPHONE 303-573-5665  
TWX 910 931 2620

May 11, 1978

Utah Division of Oil & Gas Conservation  
1588 West North Temple  
Salt Lake City, Utah 84116

Attn: Mr. Cleon Feight

Re: Anschutz #34-1  
~~SE NW Sec. 33, T6N R. 8E~~  
Summit County, Utah

Dear Mr. Feight:

Transmitted herewith in triplicate, is the Application for Permit to Drill (Form DOGC-1a) for the captioned well with survey plats attached.

Per our telephone conversation today, we anticipate having a rig available to move on this location the first of next week and would appreciate your early consideration of this application. If there are any questions concerning the application, please do not hesitate to call.

Very truly yours,

Wayne C. Pierce  
Operations Manager

WCP/mle  
Enclosures:

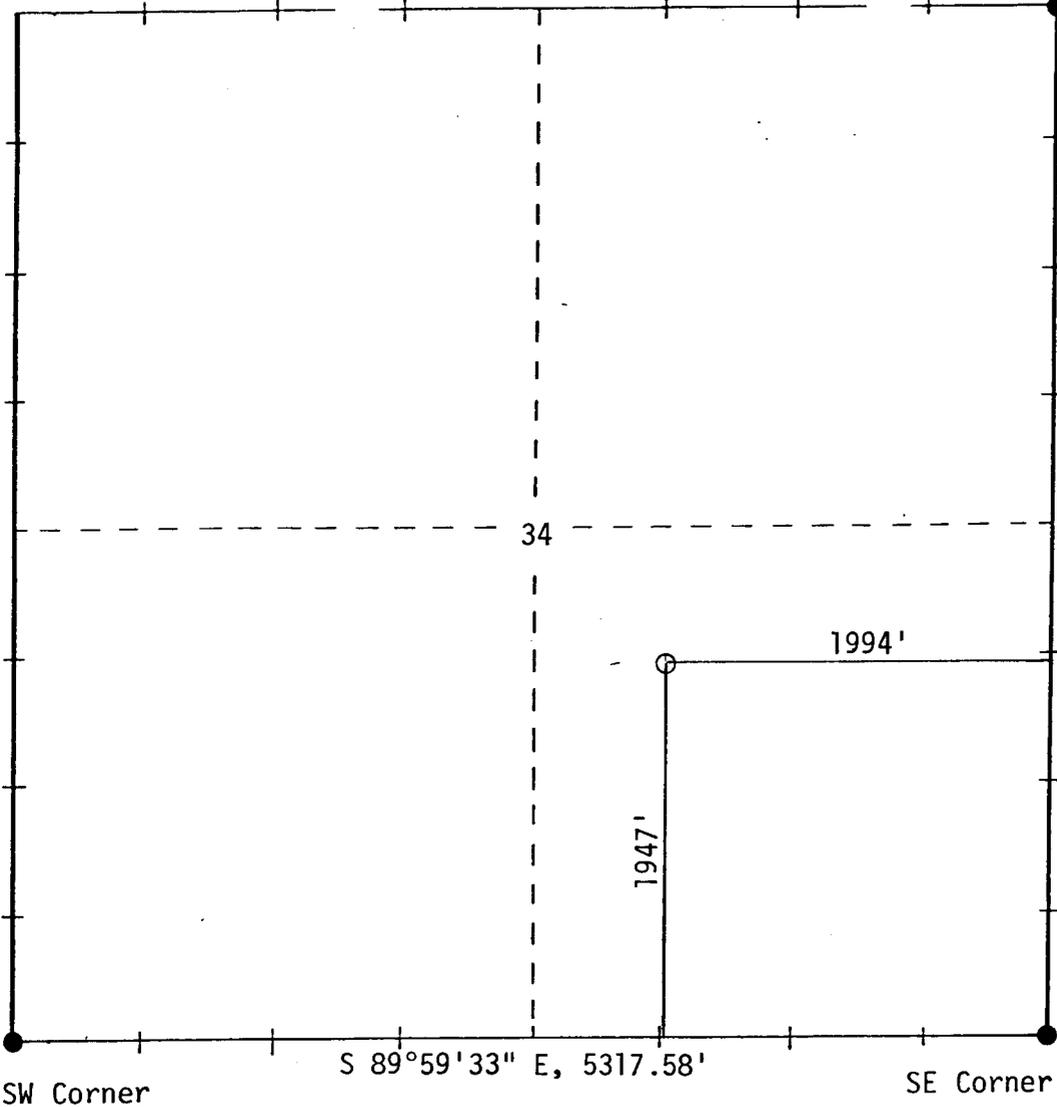


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UINTA ENGINEERING & SURVEYING, INC.  
 808 MAIN STREET, EVANSTON, WYOMING

Añ ch + 2

A ch + 2 → Ranch 34-1

1994 FEL 1947BL

Sec. 34 4N 9E

Summit

Survey 1500' 13  $\frac{3}{8}$

in 17  $\frac{1}{2}$  hole.

TD 9050

Vertical 4/10/78

4/10/78 CB



1110 DENVER CLUB BUILDING  
518 SEVENTEENTH STREET  
DENVER, COLORADO 80202  
TELEPHONE 303-573-5665  
TWX 910 931 2620



May 13, 1978

Utah Division of Oil & Gas Conservation  
1588 West North Temple  
Salt Lake City, Utah 84116

Attn: Mr. Cleon Feight

Dear Mr. Feight:

The location for Anschutz #34-1, on the the cover letter of May 11, 1978,  
is wrong. Please note : Anschutz #34-1  
NW SE Sec. 34, T 4N, R 7E  
Summit County, Utah

The location on the Application For Permit to Drill attached to that letter  
is correct.

If you have any questions please do not hesitate to call.

Very truly yours,

Wayne C. Pierce  
Operations Manager

WCP:dmp

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

\*\* FILE NOTATIONS \*\*

Date: May 16 - 1978  
Operator: Amschutz Corp.  
Well No: Amschutz Ranch 34-1  
Location: Sec. 34 T. 4N R. 7E County: Summit

File Prepared:  Entered on N.I.D.:   
Card Indexed:  Completion Sheet:

API NUMBER: \_\_\_\_\_

CHECKED BY:

Administrative Assistant [Signature]

Remarks: Verbal approval by CB7 on 4/10/78

Petroleum Engineer \_\_\_\_\_

Remarks: \_\_\_\_\_

Director 7

Remarks: \_\_\_\_\_

*IS located on gas well  
see 3 NW  
currently drilling - T3N R7E  
Mogat Creek - will see  
Deweyan @ 16,000'*

INCLUDE WITHIN APPROVAL LETTER:

Bond Required:  Survey Plat Required:

Order No.  Surface Casing Change   
to \_\_\_\_\_

Rule C-3(e), Topographic exception/company owns or controls acreage  
within a 660' radius of proposed site

O.K. Rule C-3  O.K. In \_\_\_\_\_ Unit

Other: \_\_\_\_\_

*operate  
in oil only  
gas well  
3-3N-1E*

Letter Written/Approved

May 18, 1978

The Anschutz Corporation  
1110 Denver Club Building  
Denver, Colorado 80202

Re: Well No. Anschutz Ranch 34-1  
Sec. 34, T. 4 N, R. 7 E,  
Summit County, Utah

Gentlemen:

Insofar as this office is concerned, approval to drill the above referred to well is hereby granted in accordance with Rule C-3, General Rules and Regulations.

However, said approval shall be conditional upon the fact that this well may be completed for oil production only. This due to the fact that there is an existing gas well located in Section 3, Township 3 North, Range 7 East. Should commercial gas production be encountered, it will be necessary for your company to appear before the Board of Oil, Gas, and Mining in a spacing hearing, or to shut-in one of the wells.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

PATRICK L. DRISCOLL - Chief Petroleum Engineer  
HOME: 582-7247  
OFFICE: 533-5771

Enclosed please find Form OGC-8-W, which is to be encountered whether or not water sands (aquifers) are encountered during drilling.

The API number assigned to this well is 43-043-30076.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

CLEON B. FEIGHT  
Director

STATE OF UTAH  
OIL & GAS CONSERVATION COMMISSION

(See other instructions on reverse side)

10

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other \_\_\_\_\_  
 b. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. RESVR.  Other \_\_\_\_\_

2. NAME OF OPERATOR  
The Anschutz Corporation

3. ADDRESS OF OPERATOR  
555-17th Street, Suite 2400, Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
 At surface 1949' FSL, 1923' FEL  
 At top prod. interval reported below  
 At total depth

14. PERMIT NO. 30076 DATE ISSUED

5. LEASE DESIGNATION AND SERIAL NO.  
Fee

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
The Anschutz Ranch

9. WELL NO.  
34-1

10. FIELD AND POOL, OR WILDCAT  
Wildcat

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA  
4  
Sec. 34, T. 8N-R. 7E

12. COUNTY OR PARISH Summit 13. STATE Utah

15. DATE SPUDDED 5-18-78 16. DATE T.D. REACHED 7-21-78 17. DATE COMPL. (Ready to prod.) 10-19-78 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* 7754' GR, 7768' KB 19. ELEV. CASINGHEAD 7754'

20. TOTAL DEPTH, MD & TVD 8190' 21. PLUG, BACK T.D., MD & TVD 7720' 22. IF MULTIPLE COMPL., HOW MANY\* 23. INTERVALS DRILLED BY ROTARY TOOLS 0-8190' CABLE TOOLS None

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\* 6981'-7700' KB Twin Creek 25. WAS DIRECTIONAL SURVEY MADE Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN DIL; BHC-GR' FDC/CNL/GR; HDT/FIL; CBL/VDL 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
5-1/2	15.5/20.0/17.5	7828	7-3/4	1050 sx	-0-

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	30. TUBING RECORD SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2-7/8"	6886	6860

31. PERFORATION RECORD (Interval, size and number)  
 6981-84, 6989-7003, 7018-26, 7030-32, 7060-72, 7094-98, 7100-10, 7138-41, 7178-84', 7234-40, 7247-49, 7255-58, 7267-77, 7285-90, 7376-82, 7406-10, 7515-17, 7522-24, 7531-35, 7544-46, 7555-57, 7565-67, 7569-71, (over)

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
6981-7032	5000 Gal Acid
7234-7290	5000 Gal Acid
7376-7410	5000 Gal Acid
7515-7571	9000 Gal Acid (over)

33. PRODUCTION

DATE FIRST PRODUCTION N/A PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Flowing WELL STATUS (Producing or shut-in) SI. WO P/L

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
10-16-78	12	48/64	→	125	5157	-0-	41256

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
1430 PSIA		→	250	10,313	-0-	65° @ 44° F

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Vented TEST WITNESSED BY Reese

35. LIST OF ATTACHMENTS  
Directional Survey & Log, Dip Meter, Drilling Log

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records  
 SIGNED P. B. Doty TITLE Operations Coordinator DATE 1-15-79

\*(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.)

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		38. GEOLOGIC MARKERS	
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Twin Creek	6436'	7090'	Gas
Walton Creek	7090'	7448'	Wet
Boundary Butte	7448'	7497'	Wet
Rich Member	7497'	7792'	Wet
Slide Rock	7792'	8190'	Wet

NAME	MEAS. DEPTH	TOP	TRUE VERT. DEPTH
Pruess Salt	6350		
Twin Creek	6438		
Walton Creek	7090		
Boundary Butte	7448		
Rich Member	7497		
Slide Rock	7792		

31. (cont'd) 7604-18, 7657-67, 7670-72, 7674-76, 7679-81,  
7693-95, 7698-7700, 7816-20, 2 SPF 4" Hyper Dome II  
Gun.

32. (cont'd) 7816-7820 1500 Gal Acid  
7604-7700' 3000 Gal Acid

STATE OF UTAH  
 DEPARTMENT OF OIL, GAS AND MINES  
 SALT LAKE CITY, UTAH 84143

REPORT OF OPERATIONS AND WELL STATUS REPORT

STATE Utah COUNTY Summit FIELD/LEASER Anschutz Ranch

The following is a correct report of operations and production (including drilling and production) for the month of JUNE 19 79

Agent's Address 2400 Anaconda Tower  
555- 17th Street  
Denver, Colorado 80202  
 Phone No. 303-825-6100

Company The Anschutz Corporation  
 Operator *Donja Stone*  
 Title Production Clerk

Sec. and 1/4 of 1/4	Twp	Range	Well No.	Days Produced	Barrels of Oil	Gas	Water	Barrels of Material	REMARKS
Sec. 3 NW NW	3N	7E	3-1						Currently Being Completed
Sec. 3 NW SE	3N	7E	3-2						Shut-In Waiting on Pipeline Connection
Sec. 28 SW SE	4N	7E	28-1						Temporarily Abandoned
Sec. 34	4N	7E	34-1						Shut-In Waiting on Pipeline Connection

STATE OF UTAH  
OIL & GAS CONSERVATION COMMISSION

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.)

<p>1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/></p> <p>2. NAME OF OPERATOR <u>The Anschutz Corporation</u></p> <p>3. ADDRESS OF OPERATOR <u>2400 Anaconda Tower, 555-17th St., Denver, CO 80202</u></p> <p>4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface <u>1949' FSL and 1923' FEL</u></p> <p>14. PERMIT NO. <u>43-043-30076</u></p>	<p>5. LEASE DESIGNATION AND SERIAL NO. <u>Fee</u></p> <p>6. IF INDIAN, ALLOTTEE OR TRIBE NAME</p> <p>7. UNIT AGREEMENT NAME</p> <p>8. FARM OR LEASE NAME <u>Anschutz Ranch</u></p> <p>9. WELL NO. <u>34-1</u></p> <p>10. FIELD AND POOL, OR WILDCAT <u>Anschutz Ranch</u></p> <p>11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA <u>Section 34, T3N-R7E</u></p> <p>12. COUNTY OR PARISH <u>Summit</u></p> <p>13. STATE <u>Utah</u></p>
<p>15. ELEVATIONS (Show whether DF, RT, OR, etc.) <u>7768' KB</u></p>	

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	FULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <u>Well Report</u>	<input checked="" type="checkbox"/>

(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 0700 hrs. 5/29/78.  
 Ran 13-3/8" csg. to 2220'.  
 Ran DST #1 @ 7440'  
           #2 @ 7603'  
           #3 @ 7770'  
           #4 @ 7931'  
           #5 @ 8092'  
 Logged @ 8190'.  
 Plug back to 7840' from 8190'.  
 Ran 5-1/2" csg. to 7828'.  
 Released rig 1100 hrs. 8/5/78.

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

SIGNED David H. Kingston TITLE \_\_\_\_\_ DATE 2/8/82

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

**CORE LABORATORIES, INC.**  
*Petroleum Reservoir Engineering*  
**DALLAS, TEXAS**

Phase Determination

for

THE ANSCHUTZ CORPORATION

34-1 Well  
Anschutz Ranch Field  
Utah

**CORE LABORATORIES, INC.**  
*Petroleum Reservoir Engineering*  
**DALLAS, TEXAS 75207**  
January 2, 1980

**RESERVOIR FLUID DIVISION**

The Anschutz Corporation  
2400 Anaconda Tower  
555 17th Street  
Denver, CO 80202

Attention: Mr. Wayne C. Pierce

Subject: Phase Determination  
34-1 Well  
Anschutz Ranch Field  
Utah  
Our File Number: RFL 79647A

Gentlemen:

Separator samples from the subject well arrived in our Dallas laboratory on September 20, 1979. These samples were used for a phase and Z curve determination, the results of which are in the following report.

Upon arrival, compositional analyses were performed on the separator samples and a well stream composition calculated. This composition is found on page two of this report.

The separator samples were then recombined in our laboratory to a gas-oil ratio of 39925 standard cubic feet of separator gas at 14.65 psia and 60°F. per separator barrel at 750 psig and 64°F. After recombination, a portion of this sample was subjected to constant composition expansion in a windowed cell at the reported reservoir temperature of 140°F. The sample was found to have a dew point of 2520 psig at 140°F. Since the reported reservoir pressure is 2800 psig, this sample is undersaturated gas phase at 140°F. The results of the pressure-volume relation and deviation factor data are tabulated on page three.

The sample was then analyzed for retrograde liquid condensation at 140°F. The sample was found to have a maximum liquid buildup of one percent of hydrocarbon pore space at 800 psig and 140°F. The results of the retrograde liquid curve are reported on page four.

The Anschutz Corporation  
34-1 Well

Page Two

Thank you for the opportunity to perform this phase determination. It is always a pleasure to serve The Anschutz Corporation and we look forward to assisting you again in the near future.

Very truly yours,

CORE LABORATORIES, INC.

A handwritten signature in black ink, appearing to read "P. L. Moses". The signature is stylized with a large, looping initial "P" and a long, sweeping underline.

P. L. Moses, Manager  
Reservoir Fluid Analysis

PLM:AVZ:bt  
7 cc: Addressee

**CORE LABORATORIES, INC.**  
**Petroleum Reservoir Engineering**  
**DALLAS, TEXAS**

Page 1 of 6

File RFL 79647A

Company The Anschutz Corporation Date Sampled September 9, 1979  
 Well 34-1 County \_\_\_\_\_  
 Field Anschutz Ranch State Utah

FORMATION CHARACTERISTICS

Formation Name \_\_\_\_\_  
 Date First Well Completed \_\_\_\_\_, 19\_\_\_\_  
 Original Reservoir Pressure \_\_\_\_\_ PSIG @ \_\_\_\_\_ Ft.  
 Original Produced Gas-Liquid Ratio \_\_\_\_\_ SCF/Bbl  
 Production Rate \_\_\_\_\_ Bbls/Day  
 Separator Pressure and Temperature \_\_\_\_\_ PSIG \_\_\_\_\_ °F.  
 Liquid Gravity at 60°F. \_\_\_\_\_ °API  
 Datum \_\_\_\_\_ Ft. Subsea

WELL CHARACTERISTICS

Elevation \_\_\_\_\_ Ft.  
 Total Depth \_\_\_\_\_ Ft.  
 Producing Interval \_\_\_\_\_ Ft.  
 Tubing Size and Depth \_\_\_\_\_ In. to \_\_\_\_\_ Ft.  
 Open Flow Potential \_\_\_\_\_ MMSCF/Day  
 Last Reservoir Pressure 2800 PSIG @ \_\_\_\_\_ Ft.  
 Date \_\_\_\_\_, 19\_\_\_\_  
 Reservoir Temperature 140 °F. @ \_\_\_\_\_ Ft.  
 Status of Well \_\_\_\_\_  
 Pressure Gauge \_\_\_\_\_

SAMPLING CONDITIONS

Flowing Tubing Pressure \_\_\_\_\_ PSIG  
 Flowing Bottom Hole Pressure \_\_\_\_\_ PSIG  
 Primary Separator Pressure \_\_\_\_\_ PSIG  
 Primary Separator Temperature \_\_\_\_\_ °F.  
 Secondary Separator Pressure \_\_\_\_\_ PSIG  
 Secondary Separator Temperature \_\_\_\_\_ °F.  
 Field Stock Tank Liquid Gravity \_\_\_\_\_ °API @ 60°F.  
 Primary Separator Gas Production Rate \_\_\_\_\_ MSCF/Day  
 Pressure Base 14.65 PSIA  
 Temperature Base 60 °F.  
 Compressibility Factor (F<sub>PV</sub>) 1.075  
 Gas Gravity (Laboratory) 0.674  
 Gas Gravity Factor (F<sub>g</sub>) 1.2181  
 Liquid Production Rate @ \_\_\_\_\_ Bbls/Day  
 Primary Separator Gas/Separator Liquid Ratio 39925 SCF/Bbl  
 or \_\_\_\_\_ Bbls/MMSCF

Sampled by \_\_\_\_\_

Otis Engineering

REMARKS:

*Larry Davidson*

*307-265-1164*

**CORE LABORATORIES, INC.**  
*Petroleum Reservoir Engineering*  
**DALLAS, TEXAS**

Page 2 of 6  
 File RFL 79647A  
 Well 34-1

Hydrocarbon Analyses of Separator Products and Calculated Well Stream

<u>Component</u>	<u>Separator Liquid</u>	<u>Separator Gas</u>		<u>Well Stream</u>	
	<u>Mol Percent</u>	<u>Mol Percent</u>	<u>GPM</u>	<u>Mol Percent</u>	<u>GPM</u>
Hydrogen Sulfide	Nil	Nil		Nil	
Carbon Dioxide	Trace	0.04		0.04	
Nitrogen	0.56	7.59		7.38	
Methane	20.00	81.12		79.28	
Ethane	8.50	6.99		7.04	
Propane	8.54	2.39	0.654	2.57	0.703
iso-Butane	4.07	0.54	0.176	0.65	0.211
n-Butane	8.00	0.73	0.229	0.95	0.298
iso-Pentane	5.23	0.22	0.080	0.37	0.135
n-Pentane	5.67	0.19	0.069	0.35	0.126
Hexanes	8.47	0.12	0.049	0.37	0.150
Heptanes plus	30.96	0.07	0.032	1.00	0.485
	<u>100.00</u>	<u>100.00</u>	<u>1.289</u>	<u>100.00</u>	<u>2.108</u>

Properties of Heptanes plus

API gravity @ 60°F.	<u>56.1</u>		
Specific gravity @ 60/60°F.	<u>0.7542</u>		<u>0.753</u>
Molecular weight	<u>117</u>	<u>103 (assumed)</u>	<u>116</u>

Calculated separator gas gravity (air=1.000) =  $\frac{0.674}{1.000}$   
 Calculated gross heating value for separator gas =  $\frac{1067}{1.000}$  BTU  
 per cubic foot of dry gas @ 14.65 psia and 60°F.

Primary separator gas collected @ 750 psig and 64 °F.  
 Primary separator liquid collected @ 750 psig and 64 °F.

Primary separator gas/separator liquid ratio =  $\frac{39925}{970.00}$  SCF/Bbl @750 psig & 64°F.  
 Primary separator gas/well stream ratio =  $\frac{39925}{970.00}$  MSCF/MMSCF

**CORE LABORATORIES, INC.**  
*Petroleum Reservoir Engineering*  
**DALLAS, TEXAS**

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File RFL 79647A

Well 34-1

Pressure-Volume Relations of Reservoir Fluid at 140°F.  
 (Constant Composition Expansion)

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<u>Pressure</u> PSIG	<u>Relative</u> <u>Volume</u>	<u>Deviation Factor</u> <u>Z</u>
6000	0.5550	1.075
5500	0.5784	1.027
5000	0.6073	0.980
4500	0.6429	0.934
4000	0.6917	0.894
3500	0.7606	0.861
3000	0.8582	0.833
2800 Reservoir Pressure	0.9100	0.825
2550	0.9895	0.817
2520 Dew Point Pressure	1.0000	0.816
2450	1.0275	0.815
2300	1.0940	0.814
2100	1.2019	0.818
1800	1.4175	0.826
1540	1.6808	0.838
1300	2.0160	0.853
1100	2.4168	0.870
900	3.0008	0.888
750	3.6609	0.902

These analyses, opinions or interpretations are based on observations and material supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations as to the productivity, proper operation, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

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*Petroleum Reservoir Engineering*  
**DALLAS, TEXAS**

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File RFL 79647A

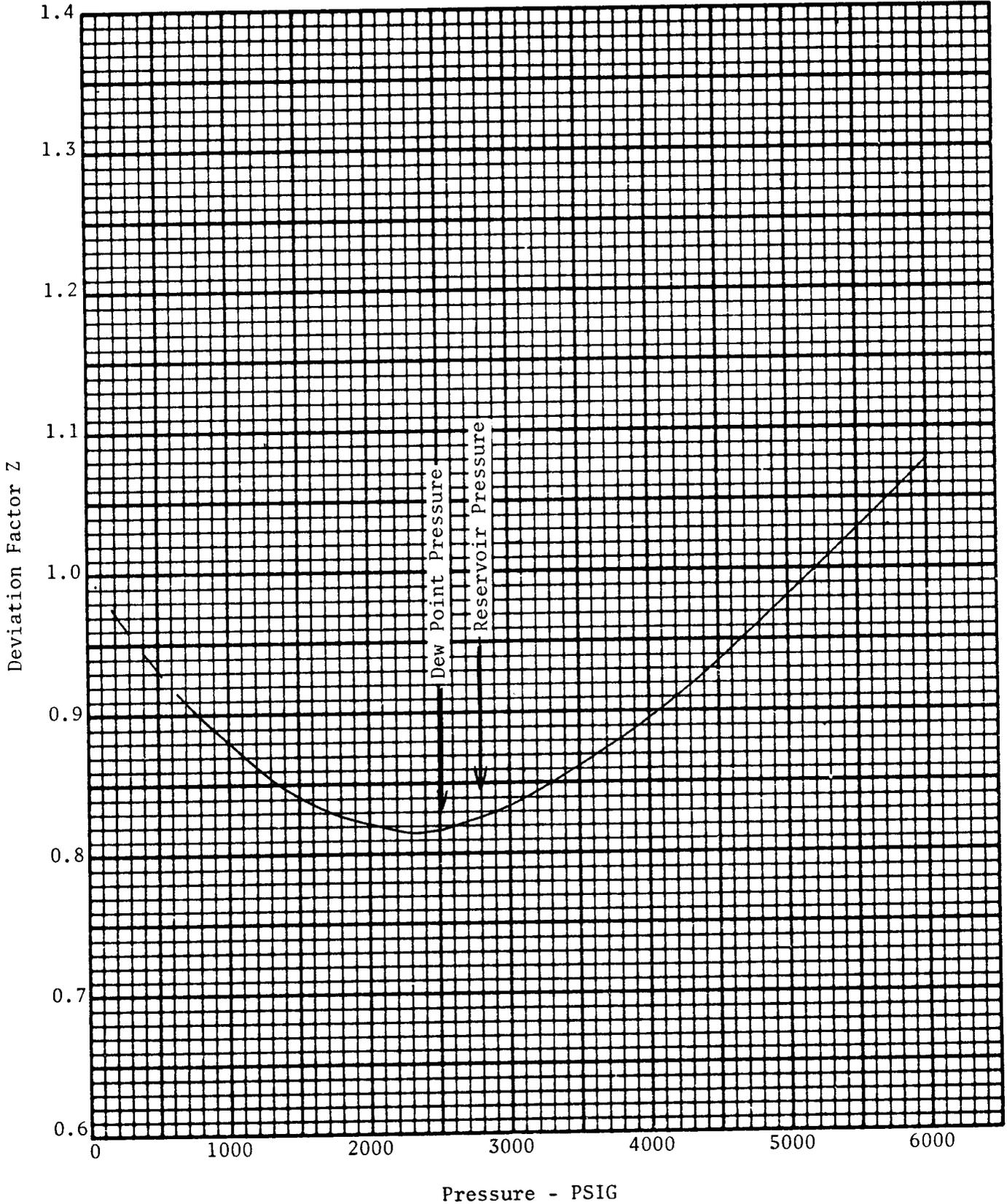
Well 34-1

Retrograde Condensation During Gas Depletion at 140°F.

<u>Pressure</u> <u>PSIG</u>	<u>Retrograde Liquid Volume</u> <u>Percent of Hydrocarbon Pore Space</u>
2520 Dew Point Pressure	0.00
2300	0.26
2100	0.46
2000 First Depletion Pressure	0.53
1500	0.81
1000	0.98
500	0.95
0	0.62

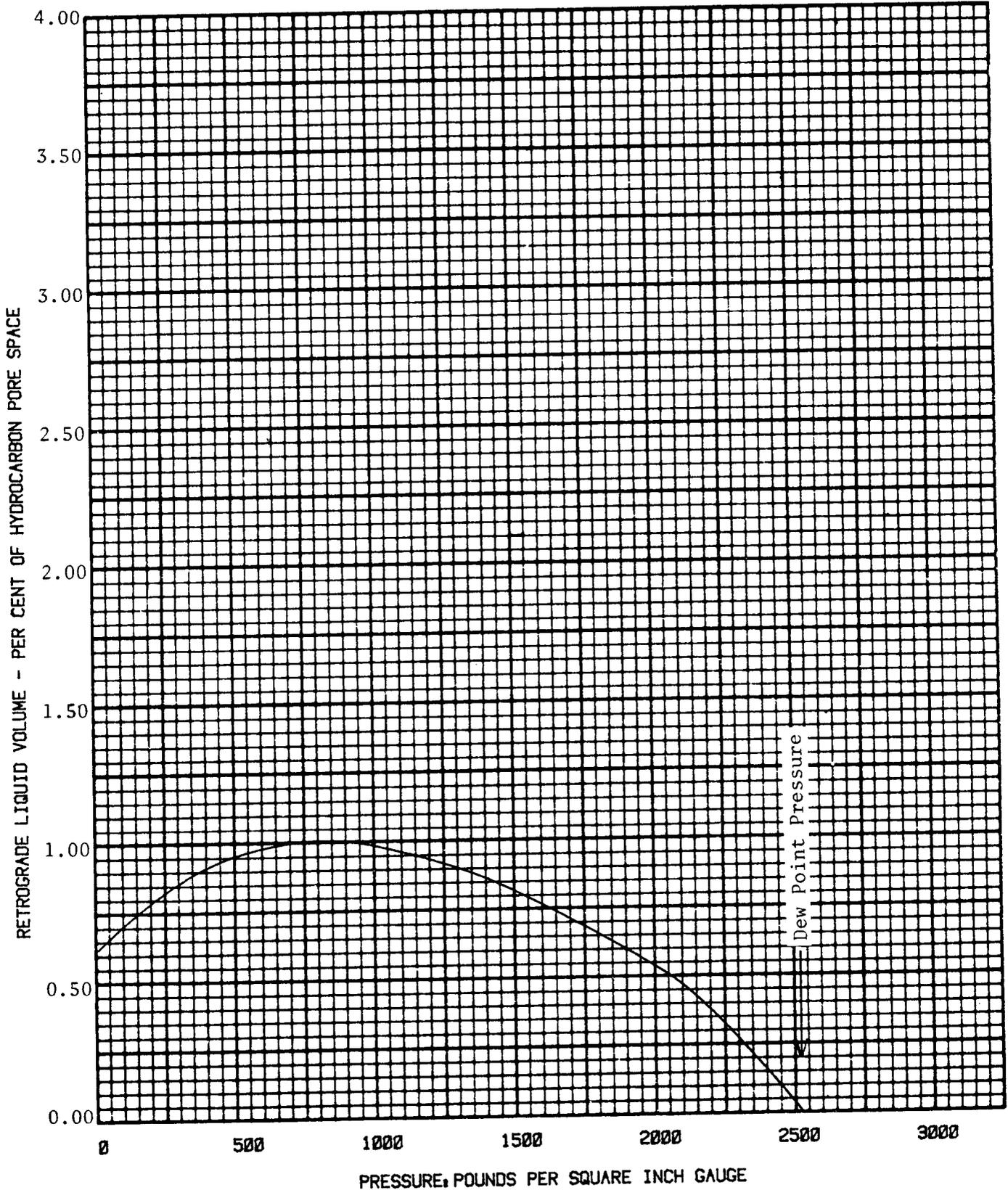
Deviation Factor Z During Depletion at 140°F.

Company The Anschutz Corporation Formation \_\_\_\_\_  
Well 34-1 County \_\_\_\_\_  
Field Anschutz Ranch State Utah



RETROGRADE CONDENSATION DURING DEPLETION

Company THE ANSCHUTZ CORPORATION Formation \_\_\_\_\_  
Well 34-1 County \_\_\_\_\_  
Field ANSCHUTZ RANCH State UTAH



CONTINGENCY PLAN

This Contingency Plan was written specifically for

Anschutz Corporation  
2400 Anaconda Tower  
Denver, Colorado 80202

Action Plan for accidental release of H<sub>2</sub>S

This plan is subject to updating

Anschutz Corporation  
2400 Anaconda Tower  
Denver, Colorado 80202



JH 2

2400 ANACONDA TOWER · 555 SEVENTEENTH STREET · DENVER, COLORADO 80202 · 303-825-6100 · TWX 910-931-2620

October 10, 1979

Mr. Cleon B. Feight, Director  
Division of Oil, Gas & Mining  
1588 West, North Temple  
Salt Lake City, Utah 84116

Anschutz Ranch 34-2  
NW $\frac{1}{4}$  Sec. 34 T4N R7E  
Summit County, Utah

Pursuant to your letter of July 30, 1979 enclosed please find, submitted in triplicate our contingency plan for the accidental release of H<sub>2</sub>S from the above location. As of this date we are drilling at a depth of 4200 feet, some 6000 feet above the first formation expected to contain H<sub>2</sub>S.

Should any additional data be required please feel free to contact us.

Sincerely,

Peter B. Doty  
Operations Coordinator

Courtesy Copy: Don Basko  
Wyoming Oil & Gas Conservation Commission

CC: JDH  
CDW  
JDB  
Well File

PBD:1kc



## CONTINGENCY & EVACUATION PLAN

Name of Company:

Anschutz Corporation

Prospect: Anschutz 34-2

Field: Anschutz Ranch

Well: 34-2

Location: 34-4N-7E  
Summit County, Utah

### I. PURPOSE

The purpose of this plan is to safeguard the lives of the public, contract personnel and company personnel in the event of equipment failures or disaster during the drilling in formations which may contain Hydrogen Sulfide Gas ( $H_2S$ ).

Anschutz Corporation has specified materials and practices for the drilling of this well to protect the safety of all concerned. However, as a precautionary measure, this contingency and evacuation plan has been prepared to further assure the safety of all concerned, should a disaster occur.

### II. DESCRIPTION OF HYDROGEN SULFIDE GAS:

$H_2S$  is colorless gas which smells similar to rotten eggs in low concentrations. In large concentrations or over long periods of exposure, the sense of smell may be paralyzed.  $H_2S$  is extremely toxic gas that must be treated with extreme care to prevent injury to people.

$H_2S$  is heavier than air (specific gravity = 1.19) and on still days tends to accumulate in low places. This accumulation could build up and lead to dangerous concentrations. However, if the  $H_2S$  gas is warmer than air, it will tend to rise until cooled off and could affect workers above the escaping source.

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Denver, Colorado 80202

The toxicity of H<sub>2</sub>S gas is as follows:

<u>Period of exposure</u>	<u>Parts H2S Gas (PPM)</u>
Prolonged exposure-no adverse effects	10 PPM
Over 1 hour could be hazardous	150 PPM
Possibly fatal in less than ½ hour	300 PPM
Fatal in a few minutes	700 PPM

III. TREATMENT OF HYDROGEN SULFIDE POISONING:

- A. Remove the patient to fresh air, call physician or ambulance if possible.
- B. If breathing is labored, or has ceased, give artificial respiration immediately. Continue until physician is available, even if person appears to be not breathing. Should disaster conditions make it impossible to move to fresh air, keep on your mask and use resuscitator on patient.
- C. If giving artificial respiration, and patient is breathing, use resuscitator to help eliminate H<sub>2</sub>S from the bloodstream.
- D. Keep patient at rest and prevent chilling.
- E. Get patient to a physician as soon as possible.

IV. BLOWOUT PREVENTION MEASURE DURING DRILLING:

- A. Blowout preventor requirements:  
All BOP equipment shall meet Anschutz Corporation's specifications as to materials acceptable for H<sub>2</sub>S service. This will be tested to full working pressure on initial installation and routinely thereafter, not to exceed two week periods and at any time a seal has been broken, a leak experienced or a known H<sub>2</sub>S bearing formation is to be drilled.
- B. Drill string requirements:  
All drill string components are to be of material

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Denver, Colorado 80202

IV. BLOWOUT PREVENTION MEASURE DURING DRILLING: (Cont.)

B. Drill string requirements (cont.)

that meets Anschutz Corporation's specifications for H<sub>2</sub>S service. All drill string components will be inspected to IADC critical service specifications prior to running in well. Corrosion will be monitored by coupons to protect drill string.

C. Gas Monitoring Equipment:

1. A continuous H<sub>2</sub>S monitoring system with two or more H<sub>2</sub>S detection heads will be in operation, one sampling from the shale shaker and one sampling from the bell nipple below the rotary table. Both units will be monitored in the mud logger's trailer and/or the dog house. Each unit will be set to trigger a blinking light on the rig floor should the amount of H<sub>2</sub>S reach 10 PPM and to trigger the alarm should the amount of H<sub>2</sub>S reach 20 PPM. Any time it is necessary to deactivate the alarm (if H<sub>2</sub>S gas is continuously present), a trained operator or H<sub>2</sub>S supervisor will monitor the H<sub>2</sub>S detection system.
2. When approaching or completing H<sub>2</sub>S formations, crew members may attach 8-hour H<sub>2</sub>S electronic personnel monitors to their person, as warranted.
3. Hand H<sub>2</sub>S sampling gas detectors will be used to check areas not covered by automatic monitoring equipment.

D. Crew Training & Protection:

1. Blowout Prevention Drills:  
Pit drill and trip drill training will be held with each crew until proficient in closing the well in. Drills will be held on a regular basis thereafter, with at least one drill per crew each week. Drills are to be on a surprise basis with the completion foreman or contract tool pusher triggering

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555 Seventeenth St.  
Denver, Colorado 80202

IV. BLOWOUT PREVENTION MEASURE DURING DRILLING: (cont.)

1. Blowout Prevention Drills: (Cont.)

the alarm. Reaction time will be checked from the time the alarm goes off until the well is simulated closed in. Closing time should be under two minutes. A copy of Anschutz Corporation's blowout drill procedure will be posted on the rig floor.

2. H<sub>2</sub>S Training and Drills:

H<sub>2</sub>S safety training will be given to all personnel, including the correct fit and use of the gas masks, resuscitator, and artificial respiration. H<sub>2</sub>S drills will be held on a surprise basis during drilling and tripping operations. The drilling foreman or contract tool pusher will trigger the H<sub>2</sub>S alarm and crews will proceed to get the mask on, and secure well as per posted drill procedures.

3. Safety Equipment:

As outlined in (Appendix I) H<sub>2</sub>S safety protection equipment will be available to/or assigned each person on location and training given in correct usage.

V. CONTINGENCY PROCEDURES

A. Responsibility:

In order to assure the proper execution of this plan, it is essential that one person be responsible for and in complete charge of implementing these procedures. The responsibility will be as follows:

1. Anschutz Corporation's representative or his assistant.
2. Contract tool pusher.  
Should he become disabled -
3. Foreman on tour.

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555 Seventeenth St.  
Denver, Colorado 80202

V. CONTINGENCY PROCEDURES

B. General Equipment:

1. Two areas on location will be designated as BRIEFING AREAS. The one that is upwind from the wellbore will be designated as the "SAFE BRIEFING AREA". The "SAFE BRIEFING AREA" will be recognizable by the positioning of the "SAFETY" trailer in this area.
2. In the case of an emergency, personnel will assemble in the "SAFE BRIEFING AREA" as per prior instructions from Anschutz Corporation's representative.
3. The H<sub>2</sub>S "SAFETY" trailer provided by ESSE International, Inc. will contain the equipment listed in Appendix I and will have a wind sock or streamer to include wind direction.
4. A second wind sock or streamer will be located at the end of catwalk and visible from the rig floor.
5. A condition warning sign will be displayed on location and at entrance location, of current operation condition.
6. A list of emergency telephone numbers (Appendix II) will be kept on rig floor, contract tool pusher's trailer, Anschutz Corporation's trailer and in "SAFETY" trailer.
7. Two barricades will be available to block entrance to location should an emergency occur.
8. An external communication system should be installed in Anschutz Corporation's trailer, mud logger's unit and on rig floor.

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Denver, Colorado 80202

B. General Equipment (Cont.)

9. An internal communication system should be installed between company trailer house, contract tool pusher's quarters, mud logger's unit, rig floor, shale shaker, mud mixer area, and choke manifold.
10. An undulating high and low pitch siren will be installed.

C. Emergency procedures and definition of warning signs:

Condition: GREEN -- NORMAL OPERATIONS

Condition: YELLOW -- POTENTIAL DANGER -- CAUTION

Cause for Condition:

1. Circulating
2. Trip gas after trips
3. Circulating out gas on choke
4. Poisonous gas present, but below threshold concentrations.

Safety Action:

1. Check safety equipment and keep it with you.
2. Do not panic.
3. The decision to ignite should be made only as a last resort and it is clear that:
  - a. Human life is endangered, and
  - b. There is no hope of controlling the well under prevailing conditions.  
Every effort should be made to notify \* office time permits.
4. Order evacuation of local people within the danger zone. Request help from local

Anschutz Corporation  
2400 Anaconda Tower  
555 Seventeenth St.  
Denver, Colorado 80202

C. Emergency procedures and definition of warning signs:  
(Cont.)

4. (Cont.)  
authorities, (State Police &  
Sheriff's Department) to evacuate  
people and to control traffic.
5. Notify office of well condition.

D. Evacuation Procedures:

1. The Anschutz Corporation's representative (or next man-in-charge) will set off the siren and notify the appropriate agencies and law officers that an emergency exists and help is needed.
2. The State Police will contact residents in the danger zone. They will start with those in a downwind direction.
3. Anschutz Corporation's representative (or next man-in-charge) will meet with appropriate agencies and law officers as soon as practical to brief them on the situation and coordinate evacuation efforts.

LIST OF APPENDICES

- APPENDIX I - SAFETY EQUIPMENT
- APPENDIX II - LIST OF RESIDENCES WITH (REQUIRED) RADIUS
- APPENDIX IIA - MAP OF PUBLIC EXPOSURE AREA
- APPENDIX IIIA - COMPANY AND CONTRACT PERSONNEL
- APPENDIX IV - LAW ENFORCEMENT AGENCIES, WYOMING OIL AND GAS BOARD AND USGS
- APPENDIX V - FIRE DEPARTMENTS AND WYOMING AIR POLLUTION CONTROL BOARD
- APPENDIX VI - MEDICAL PERSONNEL AND FACILITIES (hospitals and ambulance service)
- APPENDIX VII - LAW ENFORCEMENT AGENCIES, UTAH

APPENDIX I

SAFETY EQUIPMENT

CONSISTS OF: PLAN II

- . Safety trailer with 10-380 C. F. cylinder cascade air supply system
- . 1000' low pressure air line hose with quick connects
- . Two low pressure manifolds
- . Eight air line masks with emergency escape cylinders
- . Eight 30-minute self-contained breathing apparatus
- . Two wind socks and streamers
- . First aid kit (36 unit)
- . Oxygen powered resuscitator with cylinder
- . Flare gun with shells
- . Gas detector (pump type)
- . H<sub>2</sub>S and briefing area signs

ADDITIONAL EQUIPMENT:

- . 2 Channel electronic monitor and explosion-proof warning system.

APPENDIX II

There are no residences within a required radius of 2 miles of well site.

APPENDIX III

ANSCHUTZ CORPORATION  
2400 Anaconda Tower  
Denver, Colorado 80202

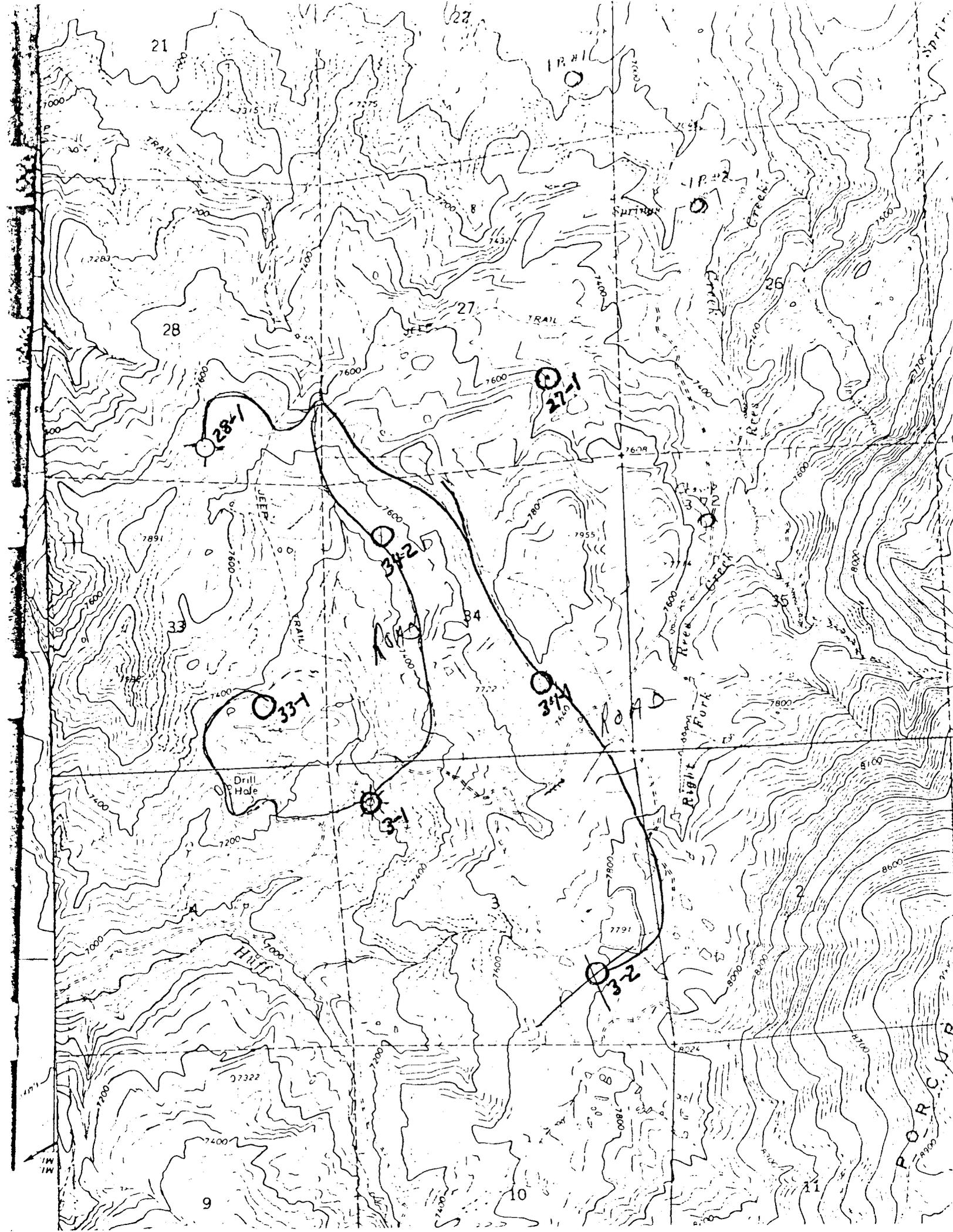
COMPANY AND CONTRACT PERSONNEL

1. Jim Bundy - Drilling Manager  
Business: 303-825-6100  
Residence: 303-795-1177
2. Jack Haley - Vice President Drilling & Production  
Office: 303-825-6100  
Residence: 303-825-6100
3. Jim Bundy - Chief Engineer  
Business: 303-825-6100  
Residence: 303-795-1177
4. George Schlick - Geologist in Charge  
Office: 303-825-6100  
Residence: 303-751-6792
5. Jack Case - Tool Pusher  
Business: 303-825-6100  
Residence: 307-234-2265
6. Del Bancroft - Tool Pusher  
Business: 303-825-6100  
Residence: 307-362-3820

CASPER, WYOMING

1. Red Rider - Drilling Superintendent  
Residence: 307-235-6628
2. Burl Lynch - Company Representative  
Business: 303-825-6100  
Residence: 307-235-5358

\* Note: They are installing phone service to the rig site and will make the number available upon notice.



APPENDIX IV

LAW ENFORCEMENT AGENCIES

SHERIFF DEPARTMENT -----911  
307-789-2331

SHERIFF, UNITA COUNTY  
Leonard Hysell-----307-782-3885

HIGHWAY PATROL-----307-789-3119

WYOMING OIL AND GAS BOARD

Oil & Gas Conservation Commission  
Wyoming Building  
Casper, Wyoming-----307-234-7147  
After Hours 307-235-6449  
307-265-4191

USGS

John L. Nault  
Rock Springs, Wyoming-----Office-307-362-6422  
Home -307-382-6142  
Mobile-307-382-0294

APPENDIX V

FIRE DEPARTMENT

FIRE DEPARTMENT -----911

FIRE CHIEF, EVANSTON-----307-789-3870

WYOMING AIR POLLUTION CONTROL COMMISSION

Environmental Air Quality Commission

Hathaway Building

Cheyenne, Wyoming-----307-777-7391

Mr. Chuck Raffelson

APPENDIX VI

MEDICAL PERSONNEL AND FACILITIES

MEMORIAL HOSPITAL-----307-856-4161  
Hospital Administrator, Vidiana Reiser  
Dr. Dean A. Holt      Hospital-----307-789-2162  
                                 Home-----307-789-3120  
  
Dr. Cali                      Hospital-----307-789-2162  
                                 Home-----307-789-3956  
  
AMBULANCE-----911  
  
EVANSTON AVIATION-----307-789-2256  
  
HELICOPTER AMBULANCE SERVICE-----307-332-4881

APPENDIX VII

LAW ENFORCEMENT AGENCIES

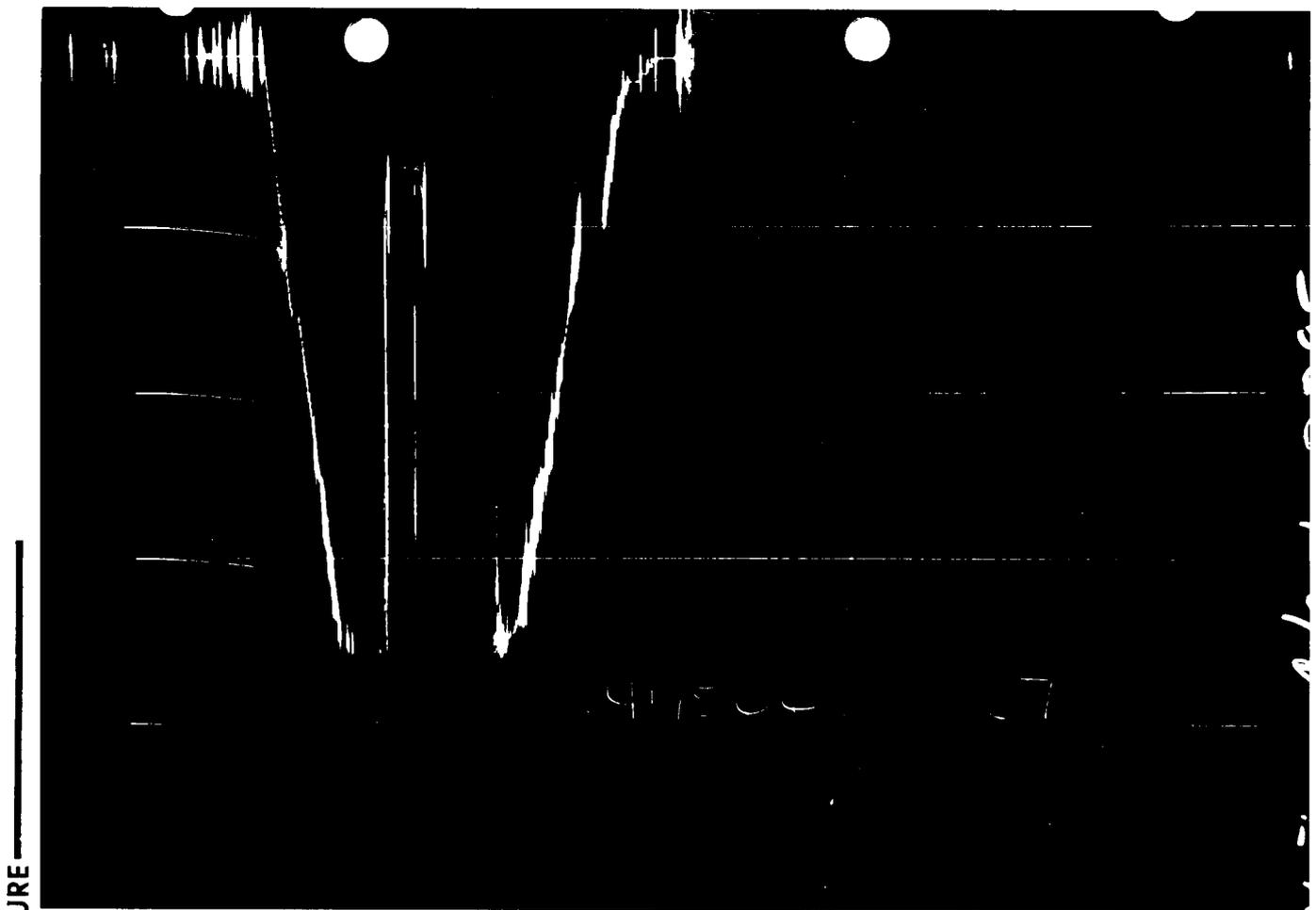
SHERIFF DEPARTMENT -----	911
SHERIFF, COLEVILLE, UTAH Ron Robinson-----	801-336-5561
HIGHWAY PATROL-----	801-336-5561

UTAH OIL GAS BOARD

Division of Oil & Gas Conservation Salt Lake City, Utah-----	801-533-5771
-----------------------------------------------------------------	--------------

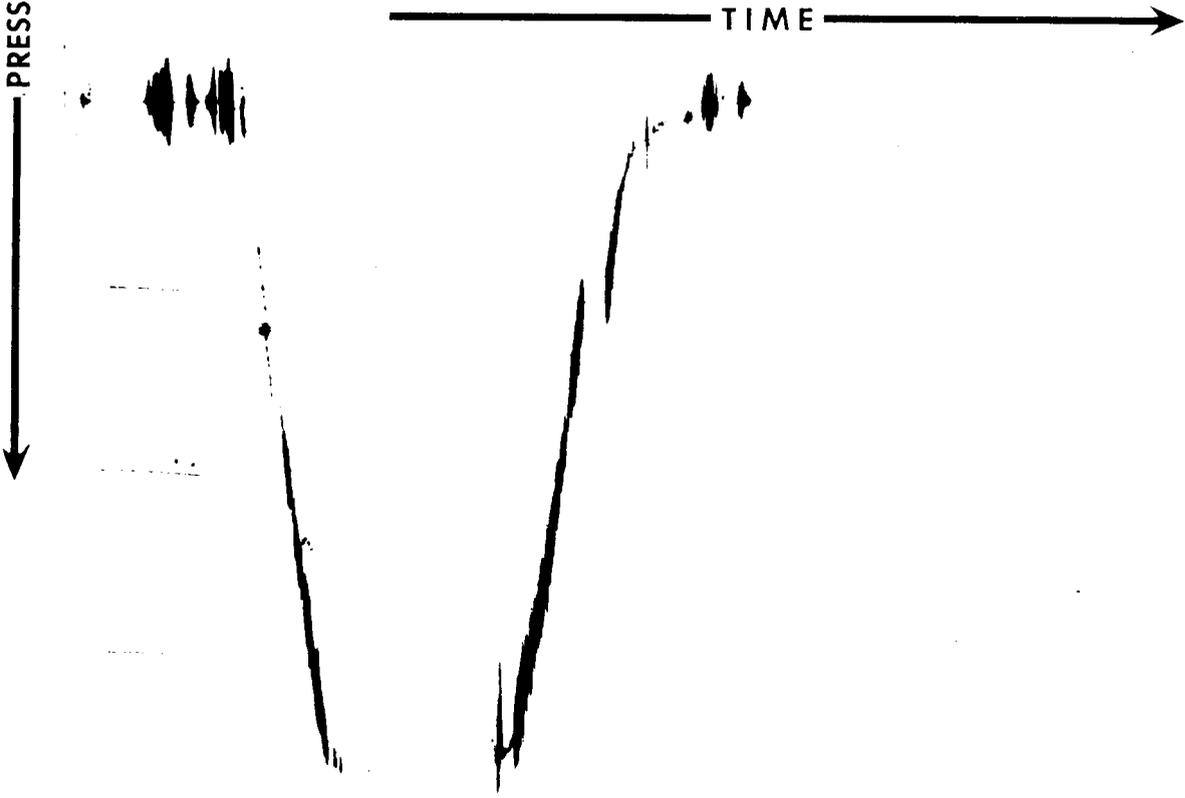
USGS

Salt Lake City, Utah-----	801-524-5500
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47500

0.1 sec



475660-235

24 Clock 2219

Each Horizontal Line Equal to 1000 p.s.i.

Legal Location Sec. Twp. - King 34 - 4N - 7E  
 Lease Name ANSCHUTZ RANCH 34-1  
 Well No. 7911 - 8023  
 Test No. 5  
 Field Area WILDCAT  
 Mea. From Tester Valve  
 Country SUMMIT  
 State UTAH  
 Lease Owner/Company Name THE ANSCHUTZ CORPORATION

FLUID SAMPLE DATA				Date	Ticket Number				
Sampler Pressure _____ P.S.I.G. at Surface Recovery: Cu. Ft. Gas <u>will send to lab.</u> cc. Oil _____ cc. Water _____ cc. Mud _____ Tot. Liquid cc. _____ Gravity _____ ° API @ _____ ° F. Gas/Oil Ratio _____ cu. ft./bbl. RESISTIVITY _____ CHLORIDE CONTENT _____ Recovery Water <u>.30 @ 68 °F.</u> <u>22,000</u> ppm Recovery Mud _____ @ _____ °F. _____ ppm Recovery Mud Filtrate _____ @ _____ °F. _____ ppm Mud Pit Sample <u>.95 @ 68 °F.</u> <u>6,400</u> ppm Mud Pit Sample Filtrate _____ @ _____ °F. _____ ppm Mud Weight <u>8.9</u> vis <u>73</u> sec				Date	7-18-78		Ticket Number		475643
Kind of Job <u>OPEN HOLE TEST</u> Tester <u>K. KESSEL</u> <u>J. BURNETT</u>				Halliburton District		ROCK SPRINGS			
Drilling Contractor <u>CIRCLE "T" DRILLING COMPANY TJB S</u> EQUIPMENT & HOLE DATA				Witness		HARVEY			
Formation Tested <u>Nugget</u> Elevation <u>7754'</u> Ft. Net Productive Interval <u>82'</u> Ft. All Depths Measured From <u>Kelly Bushing</u> Total Depth <u>8023'</u> Ft. Main Hole/Casing Size <u>8 3/4"</u> Drill Collar Length <u>384.43'</u> I.D. <u>2.375"</u> Drill Pipe Length <u>337'</u> WP - <u>????</u> I.D. <u>2.764"</u> WP- <u>3.826"</u> Packer Depth(s) <u>7936' - 7941'</u> Ft. Depth Tester Valve <u>7920'</u> Ft.				Surface Choke		1/8" Bubble Choke .75" Hose			
Cushion TYPE AMOUNT Recovered <u>4480</u> Feet of <u>gas contaminated water.</u> Recovered <u>Feet of</u> <u>TOP - .40 @ 68° 16000 ppm.</u> Recovered <u>Feet of</u> <u>MIDDLE - .30 @ 68° 22000 ppm.</u> Recovered <u>Feet of</u> <u>.40 @ 68° 16000 ppm.</u> Recovered <u>Feet of</u> <u>.30 @ 68° 22000 ppm.</u> Remarks <u>BOTTOM - .30 @ 68° 22000 ppm</u> SEE PRODUCTION TEST DATA SHEET . . .				Depth Back Pres. Valve		Bottom Choke			
*Time given and recorded does not agree									
TEMPERATURE		Gauge No. 6090	Gauge No. 6089	Gauge No.	TIME				
		Depth: 7922 Ft.	Depth: 8006 Ft.	Depth: _____ Ft.					
Est. °F.		Blanked Off NO	Blanked Off YES	Blanked Off	Tool Opened 0552 A.M. P.M.				
Actual 151 °F.		Pressures		Pressures		Pressures			
		Field	Office	Field	Office	Field	Office		
Initial Hydrostatic		3896	3740	3818	3771	Reported Minutes	Computed Minutes		
First Period	Flow Initial	225	346	265	275	_____	_____		
	Flow Final	393	399	379	430	3	4		
Closed in		2817	2817	2814	2845	30	28		
Second Period	Flow Initial	412	438	492	502	_____	_____		
	Flow Final	1941	1931	1994	1981	90	91		
Closed in		2817	2813	2832	2851	95	89*		
Third Period	Flow Initial	_____	_____	_____	_____	_____	_____		
	Flow Final	_____	_____	_____	_____	_____	_____		
Closed in		_____	_____	_____	_____	_____	_____		
Final Hydrostatic		3859	3729	3781	3753	_____	_____		

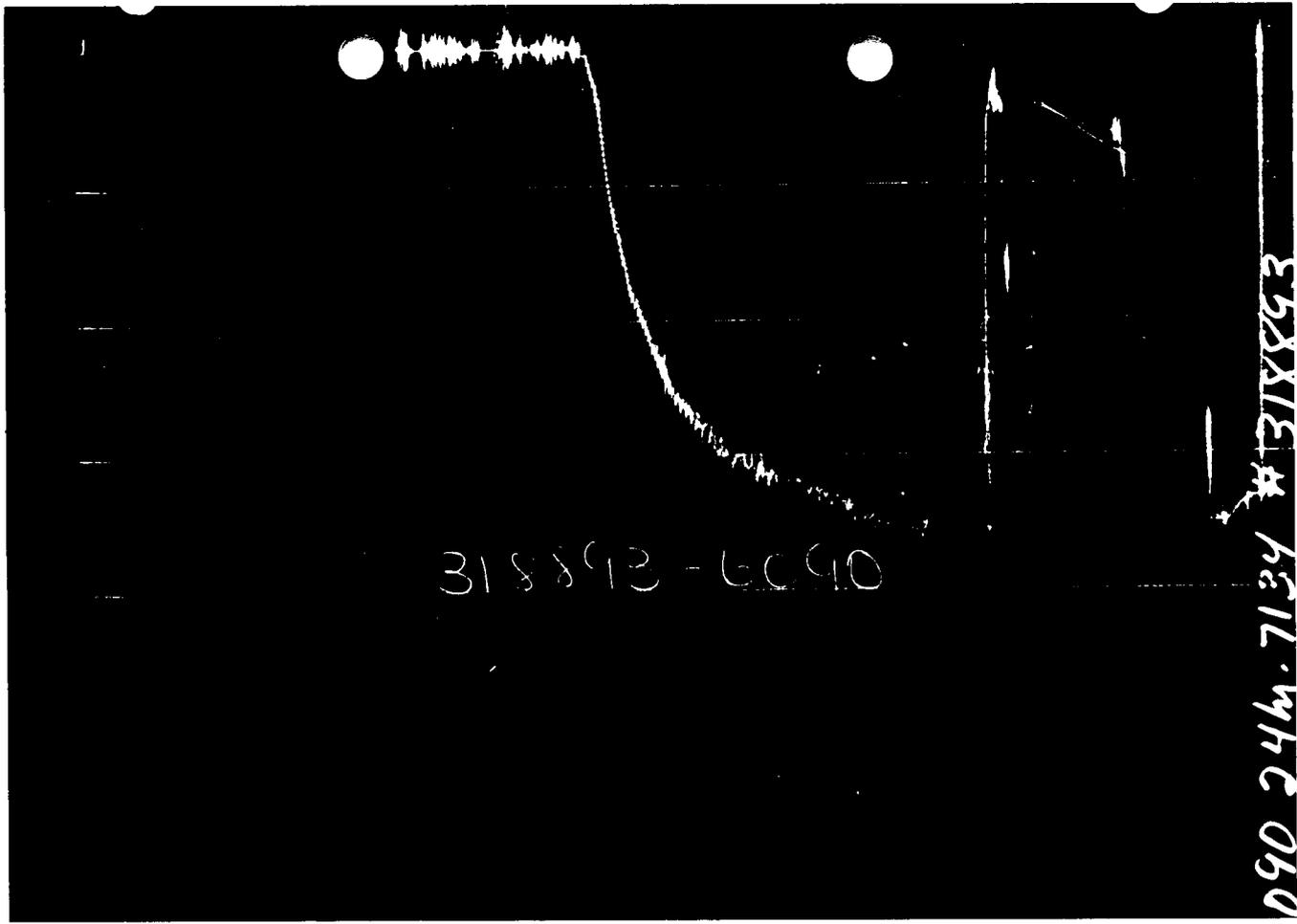
Casing perms. \_\_\_\_\_ Bottom choke .75" Surf. temp 75 °F Ticket No. 475643  
 Gas gravity \_\_\_\_\_ Oil gravity \_\_\_\_\_ GOR \_\_\_\_\_  
 Spec. gravity \_\_\_\_\_ Chlorides \_\_\_\_\_ ppm Res. \_\_\_\_\_ @ \_\_\_\_\_ °F  
 INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED 1/8" Bubble Hose

Date	a.m. p.m.	Choke Size	Surface Pressure psi	Gas Rate MCF	Liquid Rate BPD	Remarks
7-17-78						
	1330					Called out.
	2100					On location.
	2230					Picked up tools.
	2350					Tool in hole with tools.
7-18-78						
	0500					Rigged up surface equipment.
	0548					Set weight on tools.
	0552	1/8				Tester valve opened with a weak blow
						increasing to a strong blow.
	0555					Closed tool.
	0625	"				Opened tool with a strong blow.
	0640	"	2			No gas to surface.
	0655	"	4			"
	0725	"	4 +			"
	0755	"	5			Closed tool.
	0930	"				Closed tool.
						Tool out of hole with tools.
	1145					Reversed water.
	1245					Tool out of hole with tools.
	1400					Broke out tools.
	1600					Released.



	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing				
Reversing Sub	6.25"	2.25"	1.03'	
<del>XXXXXXXXXXXXXXXX</del> WEIGHT PIPE	4 1/2"	2.764"	337'	
Drill Pipe	4 1/2"	3.826"	???	
Drill Collars	7"	2.375"	384.43'	
<del>XXXXXXXXXXXXXXXX</del> X OVER	6"	2.875"	1.38'	X OVER
Dual CIP Valve				
Dual CIP Sampler	5.75"	.87"	6.75'	
Hydro-Spring Tester	5"	.75"	5'	7920'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	2.25"	4.12'	7922'
Hydraulic Jar	5"	1.75"	5'	
VR Safety Joint	5"	1"	2.62'	
Pressure Equalizing Crossover				
Packer Assembly	5.03"	1.68"	5.20'	7936'
Distributor				
Packer Assembly	5.03"	1.68"	5.20'	7941'
<del>XXXXXXXXXXXXXXXX</del> X OVER	4.875"	2.75"	.87'	
Pressure Equalizing Tube				
ANCHOR PIPE SAFETY JOINT	5"	1.50"	4.30'	
<del>XXXXXXXXXXXXXXXX</del> X OVER	5"	2.50"	.80'	X OVER
<del>XXXXXXXXXXXXXXXX</del> X OVER	6"	2.75"	1.13'	
Anchor Pipe Safety Joint				
DRILL COLLARS	7"	2.375"	30.73'	
<del>XXXXXXXXXXXXXXXX</del> X OVER	6"	2.875"	1.12'	
<del>XXXXXXXXXXXXXXXX</del> X OVER	5"	2.75"	.71'	
<del>XXXXXXXXXXXXXXXX</del> ANCHOR	5"	1.50"	20'	
BLANKED SUB	5"	0"	1'	
Anchor Pipe Safety Joint				
AP RUNNING CASE	5"	2.25"	4.12'	8006'
Side Wall Anchor				
Drill Collars				
Flush Joint Anchor	5"	1.50"	10'	
Blanked-Off B.T. Running Case	5"	2.44"	4.07'	
Total Depth				8023'

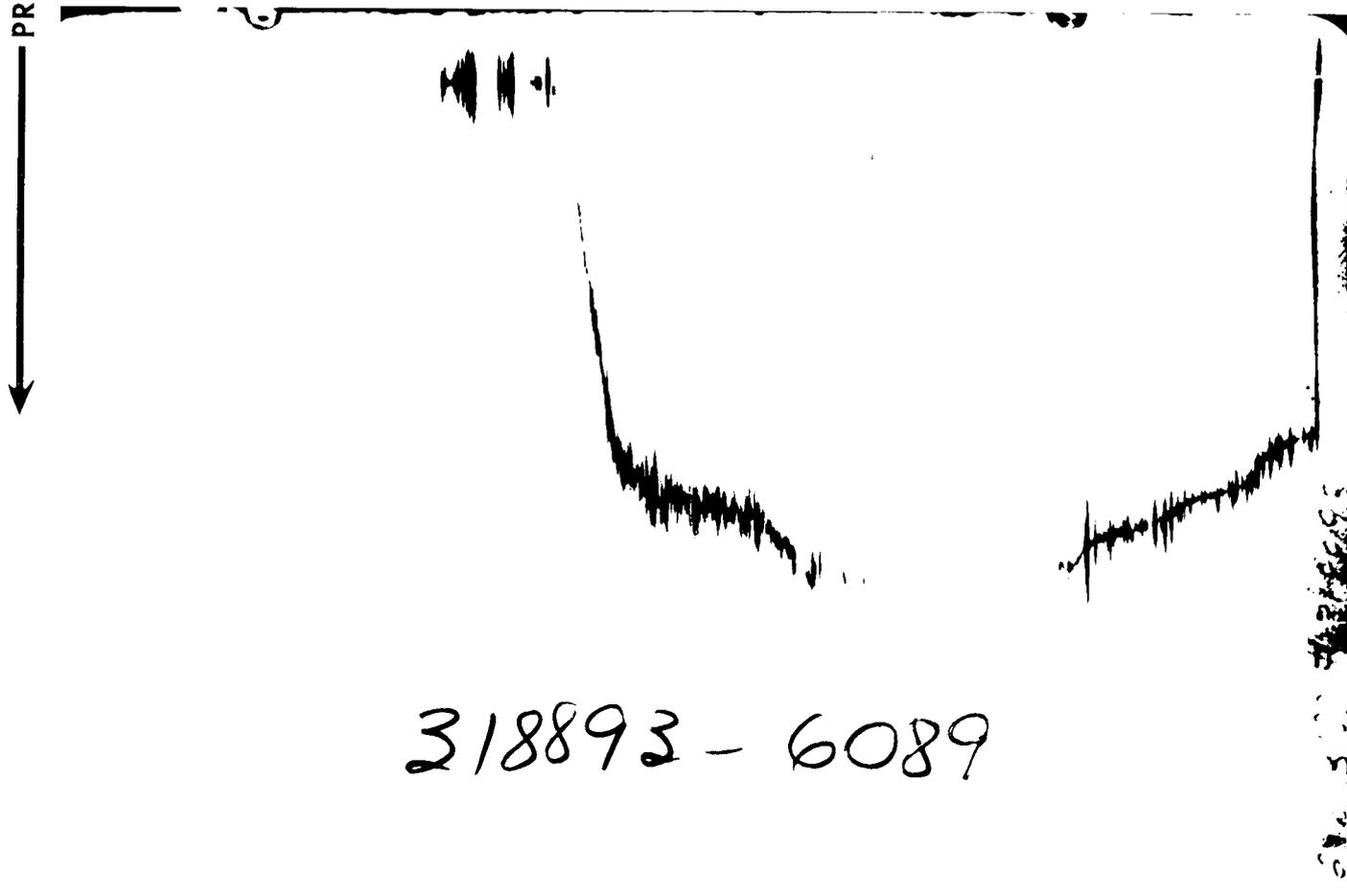
PRESSURE



318893 - 6090

090 24h. 7134 #318893

TIME



318893 - 6089

090 24h. 7134 #318893

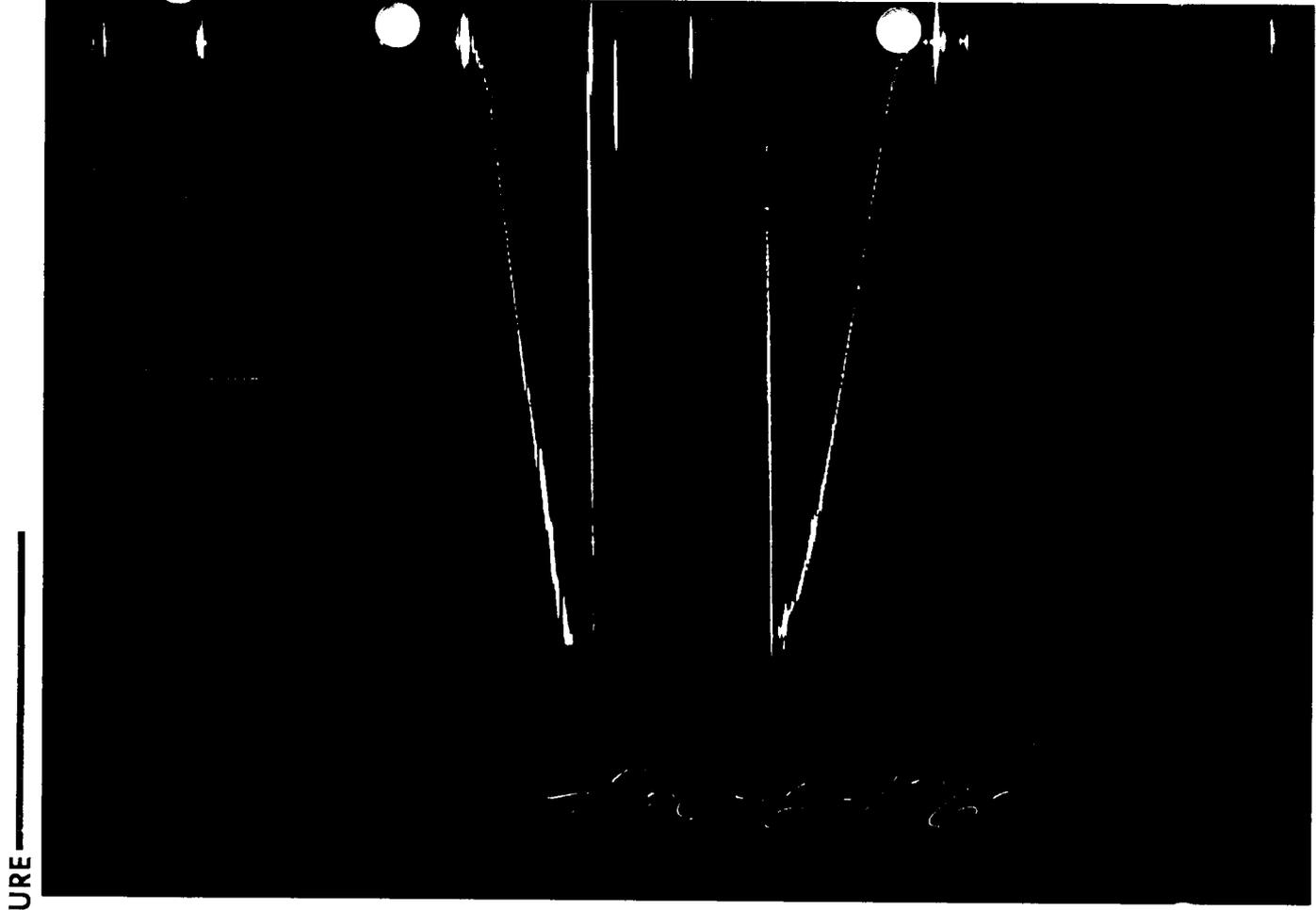
Each Horizontal Line Equal to 1000 p.s.i.

FLUID SAMPLE DATA				Date	Ticket Number	
Sampler Pressure <u>100</u> P.S.I.G. at Surface				7-15-78	318896	
Recovery: Cu. Ft. Gas <u>.49</u>				Kind of Job	Halliburton District	
cc. Oil _____				OPEN HOLE	ROCK SPRINGS	
cc. Water _____				Tester	V. L. BIGGINS Witness SAM HARVEY	
cc. Mud <u>750</u>				Drilling Contractor	CIRCLE "A" RIG #10 bj	
Tot. Liquid cc. <u>750</u>				EQUIPMENT & HOLE DATA		
Gravity _____ ° API @ _____ ° F.				Formation Tested	Twin Creek	
Gas/Oil Ratio _____ cu. ft./bbl.				Elevation	<u>7754'</u> Ft.	
RESISTIVITY				Net Productive Interval	<u>181'</u> Ft.	
CHLORIDE CONTENT				All Depths Measured From	Kelly Bushing	
Recovery Water @ _____ ° F. _____ ppm				Total Depth	<u>7931'</u> Ft.	
Recovery Mud <u>.46</u> @ <u>88</u> ° F. <u>10200</u> ppm				Main Hole/Casing Size	8 3/4"	
Recovery Mud Filtrate <u>.25</u> @ <u>88</u> ° F. <u>20200</u> ppm				Drill Collar Length	<u>279' ??</u> I.D. <u>2.375"</u>	
Mud Pit Sample <u>.40</u> @ <u>90</u> ° F. <u>12000</u> ppm				Drill Pipe Length	<u>7140' ??</u> I.D. <u>3.826"</u>	
Mud Pit Sample Filtrate <u>.22</u> @ <u>90</u> ° F. <u>23000</u> ppm				Packer Depth(s)	<u>7750'</u> <u>7755'</u> Ft.	
Mud Weight <u>9.0</u> vis _____ sec				Depth Tester Valve	<u>7734'</u> Ft.	
Cushion				Surface Choke	<u>.50"</u>	
TYPE AMOUNT				Bottom Choke	<u>.75"</u>	
Depth Back Pres. Valve				Recovered <u>279</u> Feet of drilling mud, slightly gas cut.		
Recovered				Recovered Feet of TOP OF FLUID: RESISTIVITY 1.20 @ 82° - 4200 PPM		
Recovered				FILTRATE .09 @ 82° - 5800 PPM		
Recovered				MIDDLE OF FLUID: RESISTIVITY .42 @ 82° - 12300 PPM		
Recovered				FILTRATE .22 @ 82° - 26000 PPM		
Recovered				Feet of		
Recovered				Feet of		
Remarks				SEE PRODUCTION TEST DATA SHEET....		
TEMPERATURE				Gauge No. 1767	Gauge No. 235	Gauge No.
Depth:				7738' Ft.	7916' Ft.	Depth: Ft.
Est. °F.				24 Hour Clock	24 Hour Clock	Hour Clock
Actual 140 °F.				Blanked Off NO	Blanked Off YES	Blanked Off
Pressures				Pressures	Pressures	TIME
Field Office				Field Office	Field Office	Tool Opened 0607 A.M. P.M.
Initial Hydrostatic				3696 3734	3690 3790	Opened 0911 A.M. P.M.
First Period Flow				Initial 105 80	190 198	Reported Minutes
Final 105 117				190 227	4	Computed Minutes
Closed in 466 474				539 566	30	
Second Period Flow				Initial 120 120	204 217	
Final 150 140				233 226	60	
Closed in 270 254				335 338	90	
Third Period Flow				Initial		
Final						
Closed in						
Final Hydrostatic				3606 3633	3748 3734	

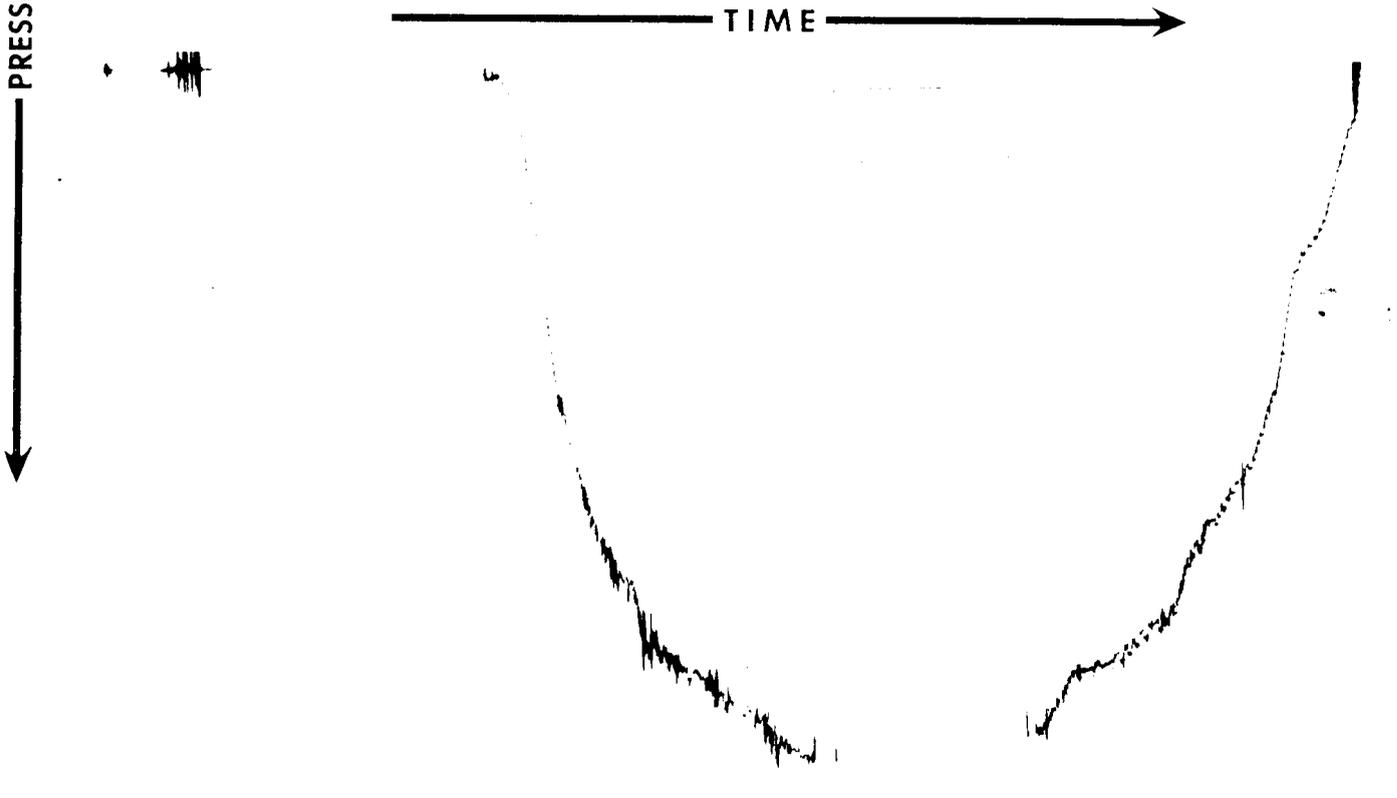
Legal Location: ANSCHUTZ RANCH  
 Sec. - Twp. - Rng. 34 2N 7E  
 Lease Name: ANSCHUTZ RANCH  
 Well No.: 34-1  
 Test No.: 4  
 Tested Interval: 7755' to 7931'  
 County: SUMMIT  
 State: UTAH  
 Lease Owner/Company Name: ANSCHUTZ CORPORATION



	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing				
Reversing Sub <span style="float: right;">4½" IF</span>	6.25"	2.25"	1.03'	
Water Cushion Valve				
Drill Pipe	4.50"	3.826"	7140'??	
Drill Collars	7.00"	2.375"	279'??	
Handling Sub & Choke Assembly	6.25"	2.75"	1.38' 4½ IF X 4½ FH	
Dual CIP Valve				
Dual CIP Sampler	5.03"	.75"	6.40'	7729'
Hydro-Spring Tester	5.00"	.75"	5.03'	7734'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5.00"	2.25"	4.12'	7738'
Hydraulic Jar	5.00"	1.75"	5.00'	
VR Safety Joint	5.00"	1.00"	2.62'	
Pressure Equalizing Crossover				
Packer Assembly	5.00"	1.53"	5.07'	7750'
Distributor				
Packer Assembly	5.00"	1.53"	5.07'	7755'
Flush Joint Anchor				
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case				
Drill Collars				
Anchor Pipe Safety Joint	5.75"	1.50"	4.30'	
Packer Assembly	6.25"	2.25"	1.12' 4½ FH X 4½ IF	
Distributor	7.00"	2.375"	124' DRILL COLLARS	
Packer Assembly	6.125" 5.75"	2.875" 2.25"	1.38 4½ IF X 4½ FH .80' 4½ FH X 3½ FH	
Anchor Pipe Safety Joint	5.00"	2.37"	25' FLUSH JT. ANCHOR	
Side Wall Anchor	5.00"		1.00' BLANKED OFF SUB	
Drill Collars AP RUNNING CASE	5.00"	2.25"	4.12'	7916'
Flush Joint Anchor	5.00"	2.37"	10'	
Blanked-Off B.T. Running Case	5.00"	2.44"	4.07'	
Total Depth				7931'



*Handwritten scribbles or markings on the graph area.*



475642-235

Each Horizontal Line Equal to 1000 p.s.i.

FLUID SAMPLE DATA				Date	7-13-78	Ticket Number	475642
Sampler Pressure	20	P.S.I.G. at Surface		Kind of Job	OPEN HOLE TEST	Halliburton District	ROCK SPRINGS
Recovery: Cu. Ft. Gas				Tester	J. BURNETT	Witness	S. HARVEY
cc. Oil				Drilling Contractor	CIRCLE "A" DRILLING COMPANY #10		
cc. Water				EQUIPMENT & HOLE DATA TJB			
cc. Mud	1850				Formation Tested	Twin Creek Rich Mby	
Tot. Liquid cc.	1850				Elevation	7754'	Ft.
Gravity	° API @		° F.		Net Productive Interval	154'	Ft.
Gas/Oil Ratio			cu. ft./bbl.		All Depths Measured From	Kelly Bushing	
		RESISTIVITY	CHLORIDE CONTENT		Total Depth	7770'	Ft.
Recovery Water	@	° F.	ppm		Main Hole/Casing Size	8 3/4"	
Recovery Mud	.29	@ 68	° F.	24,000	Drill Collar Length	312.46' I.D. 2.375"	
Recovery Mud Filtrate	@	° F.	ppm		Drill Pipe Length	6951'-337' WP I.D. 3.826"-3.640" WP	
Mud Pit Sample	.225	@ 68	° F.	30,000	Packer Depth(s)	7610' - 7616' Ft.	
Mud Pit Sample Filtrate	@	° F.	ppm		Depth Tester Valve	7593' Ft.	
Mud Weight	9.1	vis	70	sec			

TYPE	AMOUNT	Depth Back Ft.	Surface Choke	Bottom Choke
Cushion				.75"
Recovered	60 Feet of mud.			
Recovered	Feet of			
Recovered	Feet of			
Recovered	Feet of			
Recovered	Feet of			
Remarks	Sampler mud - res. .24 @ 68° 28000 ppm. . .			

See Production Test Data Sheet . . .

TEMPERATURE	Gauge No.	1767	Gauge No.	235	Gauge No.		TIME
	Depth:	7595 Ft.	Depth:	7752 Ft.	Depth:	Ft.	
Est. °F.	24 Hour Clock		24 Hour Clock		Hour Clock		Tool A.M.
	Blanked Off NO		Blanked Off YES		Blanked Off		Opened 1524 P.M.
Actual 151 °F.	Pressures		Pressures		Pressures		Opened A.M.
	Field	Office	Field	Office	Field	Office	Bypass 1857 P.M.
Initial Hydrostatic	3606	3591	3690	3684			Reported Minutes
First Period Flow	Initial	45	48	117	125		Computed Minutes
	Final	45	48	117	128		
	Closed in	466	446	496	513		3
Second Period Flow	Initial	60	48	131	106		
	Final	60	47	131	117		30
	Closed in	481	467	524	537		90
Third Period Flow	Initial						90
	Final						
Final Hydrostatic	3576	3558	3676	3637			

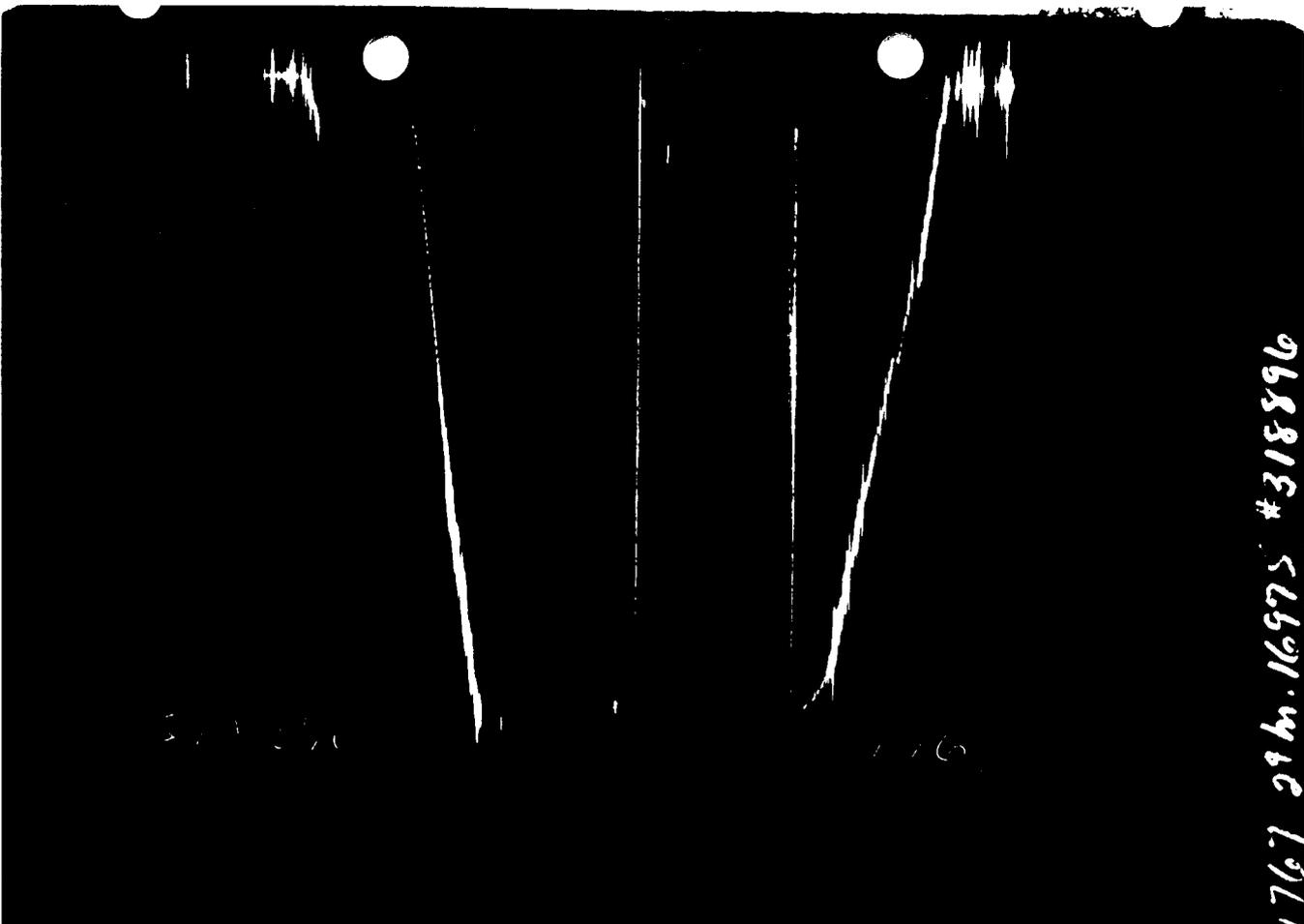
Legal Location Sec. - Twp. - Rng. 34 - 2N - 7E  
 Lease Name ANSCHUTZ RANCH 34-1  
 Well No. 34-1  
 Test No. 3  
 Field Area WILDCAT  
 Meas. From Tester Valve  
 Tested Interval 7616' - 7770'  
 County SUMMIT  
 State UTAH  
 Lease Owner/Company Name ANSCHUTZ CORPORATION

Casing perms. \_\_\_\_\_ Bottom choke .75" Surf. temp 80 °F Ticket No. 475642  
 Gas gravity \_\_\_\_\_ Oil gravity \_\_\_\_\_ GOR \_\_\_\_\_  
 Spec. gravity \_\_\_\_\_ Chlorides \_\_\_\_\_ ppm Res. \_\_\_\_\_ @ \_\_\_\_\_ °F  
 INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED 6" Choke - Flow Meter

Date Time	a.m. p.m.	Choke Size	Surface Pressure psi	Gas Rate MCF	Liquid Rate BPD	Remarks
0300						On location.
						Tripped out of hole to pick up tools.
0600						Picked up tools.
0800						Waited on Cross Over.
1230						Made up tools.
1300						Tripped in hole with tools.
1522						Set weight on tools.
1524		Bubble Hose				Tester valve opened with a weak blow
						increasing to a strong blow in 30
						seconds.
1527		"	2			Closed tool.
1557		"				Opened tool with a weak blow increasing
						to a strong blow in 20 seconds.
1558		"	2			No gas to surface.
1559		1/2				Opened to flow meter.
1602			1/4			No gas to surface.
1605			1/4			Changed to 1/4" plate in flow meter.
1612		1/4				Weak blow.
1727		"				Weak blow. Closed tool. No gas to
						surface.
1857						Closed tool.
1910						Tripped out of hole with tools.
2230						Broke out tools and loaded truck.
2400						Released.

	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing				
Reversing Sub	6.25"	2.25"	1.03'	
<del>XXXXXXXXXXXX</del> Weight Pipe	4.50"	3.640"	337'	
Drill Pipe	4.50"	3.826"	6951'	
Drill Collars	7"	2.375"	312.46'	
<del>XXXXXXXXXXXX</del> X OVER	4 1/2" FH X 6"	2.875"	1.38'	
Dual CIP Valve	4 1/2" FH			
Dual CIP Sampler	5.75"	.87"	6.75'	
Hydro-Spring Tester	5"	.75"	5'	7593'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	2.25"	4.12'	7595'
Hydraulic Jar	5"	1.75"	5'	
VR Safety Joint	5"	1"	2.68'	
Pressure Equalizing Crossover				
Packer Assembly	5"	1.53"	5.7'	7600'
Distributor				
Packer Assembly	5"	1.53"	5.7'	7616'
<del>XXXXXXXXXXXX</del> X OVER	3 1/2" FH X	5.75"	.72'	4 1/2" FH
Pressure Equalizing Tube	ANCHOR PIPE SJ	5.75"	1.50"	4.30'
Blanked-Off B.T. Running Case	4 1/2" FH X 4 1/2" IF	6.25"	3.625"	1.13'
Drill Collars	4 1/2" IF	7"	2.375"	92.70'
<del>XXXXXXXXXXXX</del> X OVER	X OVER	6.25"	2.75"	1.12'
FLUSH JOINT ANCHOR	5.75"		32'	
Packer Assembly	4 1/2" FH X 3 1/2" FH			
<del>XXXXXXXXXXXX</del> X OVER	X OVER	5.75"	2.25"	.80'
BLANKED OFF SUB	5"	0"	1'	
Packer Assembly				
AP RUNNING CASE	5"	2.25"	4.12'	7752'
3 1/2" FH X 4 1/2" FH				
X OVER	5.75"	2.50"	.71'	
Anchor Pipe Safety Joint				
Side Wall Anchor				
Drill Collars				
Flush Joint Anchor	5.75"	2.87"	10'	
Blanked-Off B.T. Running Case	5.75"	2.50"	4.12'	
Total Depth				7770'

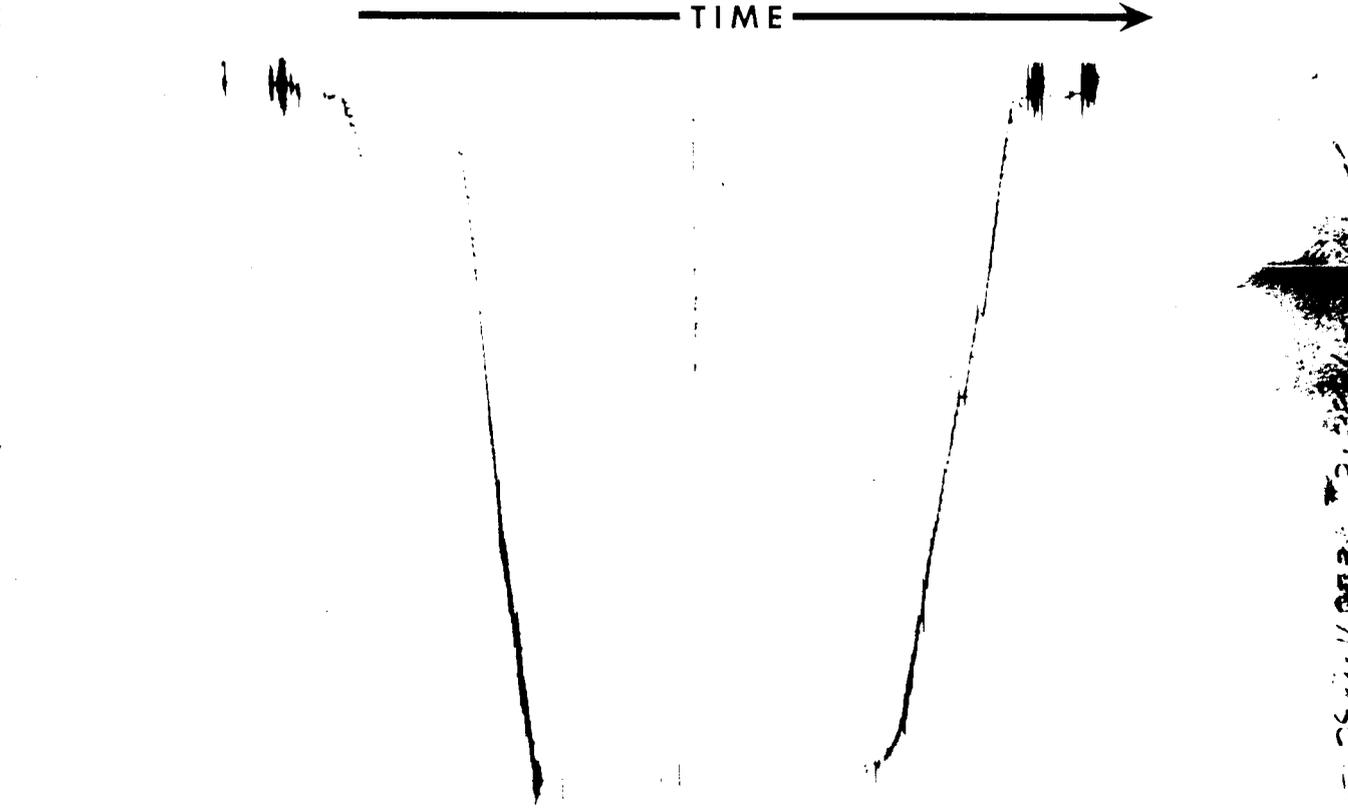
PRESSURE



TIME

1767 29h.16975 #318896

PRESSURE



318896-235

318896-235

Each Horizontal Line Equal to 1000 p.s.i.

FLUID SAMPLE DATA				Date	7-10-78	Ticket Number	318893	
Sampler Pressure	500	P.S.I.G. at Surface		Kind of Job	OPEN HOLE TEST	Halliburton District	ROCK SPRINGS	
Recovery: Cu. Ft. Gas	3.35			Tester	V.L. BIGGINS	Witness		
cc. Oil				Drilling Contractor	CIRCLE "A" DRILLING COMPANY	PW		
cc. Water				EQUIPMENT & HOLE DATA				
cc. Mud				Formation Tested	Twin Creek			
Tot. Liquid cc.				Elevation	7754'	Ft.		
Gravity		° API @ °F.		Net Productive Interval	7402' - 7600' (198') Ft.			
Gas/Oil Ratio		RESISTIVITY	cu. ft./bbl.	All Depths Measured From	Kelly Bushing			
				Total Depth	7600' Ft.			
Recovery Water	@	°F.	ppm	Main Hole/Casing Size	8 3/4"			
Recovery Mud	@	°F.	ppm	Drill Collar Length	226'	I.D.	2 3/8"	
Recovery Mud Filtrate	@	°F.	ppm	Drill Pipe Length	7149'	I.D.	3.826"	
Mud Pit Sample	.80 @ 85	°F.	5200 ppm	Packer Depth(s)	7402' - 7407' Ft.			
Mud Pit Sample Filtrate	.55 @ 85	°F.	9000 ppm	Depth Tester Valve	7386' Ft.			
Mud Weight	9.0	vis	sec					
Cushion	TYPE	AMOUNT	Depth Back Ft.	Surface Choke	.50"	Bottom Choke	.75"	
Recovered	832	Feet of	gas cut mud.					
Recovered		Feet of						
Recovered		Feet of						
Recovered		Feet of						
Recovered		Feet of						
Remarks	Top of tools: 1.08 @ 84°F. - 2600 ppm 1.4 @ 84°F. - 3400 ppm							
	Middle of tools: .36 @ 82°F. - 15,000 ppm .13 @ 82°F. - 46,000 ppm							
	Clock intermittently slipping throughout test on B.T. #6090.							
	- SEE PRODUCTION TEST DATA SHEET -							
TEMPERATURE	Gauge No. 6090	Gauge No. 6089	Gauge No.	TIME				
	Depth: 7390 Ft.	Depth: 7585 Ft.	Depth: Ft.					
Est. °F.	24 Hour Clock	24 Hour Clock	Hour Clock	Tool A.M. Opened 0640 P.M.				
Actual 140 °F.	Blanked Off NO	Blanked Off YES	Blanked Off	Opened A.M. Bypass 1013 P.M.				
	Pressures		Pressures		Pressures		Reported	Computed
	Field	Office	Field	Office	Field	Office	Minutes	Minutes
Initial Hydrostatic	3561	3535	3669	3651				
First Period Flow	Initial	300	530	493	604			
	Final	412	451	530	491		3	4
	Closed in	2687	2703	2758	2765		30	29
Second Period Flow	Initial	356	356	455	455			
	Final	599	622	739	765		90	89
	Closed in	2687	2703	2758	2764		90	91
Third Period Flow	Initial							
	Final							
	Closed in							
Final Hydrostatic	3487	3500	3576	3589				

Legal Location: 34 - 34 N - 7 E  
 Sec. - Twp. - Rng. 34 - 34 N - 7 E  
 Lease Name: ANSCHUTZ RANCH  
 Well No.: 34-1  
 Test No.: 2  
 Tested Interval: 7407' - 7600'  
 Field Area: WILDCAT  
 County: SUMMIT  
 State: UTAH  
 Lessee Owner/Company Name: THE ANSCHUTZ CORPORATION

Casing perms. \_\_\_\_\_ Bottom choke \_\_\_\_\_ Surf. temp \_\_\_\_\_ °F Ticket No. 318893  
 Gas gravity \_\_\_\_\_ Oil gravity \_\_\_\_\_ GOR \_\_\_\_\_  
 Spec. gravity \_\_\_\_\_ Chlorides \_\_\_\_\_ ppm Res. \_\_\_\_\_ @ \_\_\_\_\_ °F  
 INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED Lt-20 Manifold

Date Time	Choke Size	Surface Pressure psi	Gas Rate MCF	Liquid Rate BPD	Remarks
7-10-78 0700 a.m.					Called out.
1400 p.m.					On location - waited on rig.
7-11-78					
0100					Picked up tools.
0330					Started in hole.
0600					Rigged up surface equipment.
0630					Set weight on packers.
0640	Bubble 1/8" Hose				Tester valve opened with a fair blow increasing to a strong blow.
0643	"				Closed tool.
0713	"				Opened dual CIP valve.
0715	1/2"	70	532		Gas to the surface on 1/2" choke.
0720	"	100	720		
0725	"	110	783		
0730	"	120	845		
0745	"	140	971		
0800	"	160	1096		
0815	"	170	1159		
0830	"	180	1221		
0843	"	"	"		Closed tool.
1013					Opened bypass and started out of hole.
1300					Rigged up to drop bar to reverse out.

Gauge No. 6090			Depth 7390'				Clock No. 7134			24 hour		Ticket No. 318893			
First Flow Period			First Closed In Pressure			Second Flow Period		Second Closed In Pressure			Third Flow Period		Third Closed In Pressure		
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.
0	.000	530	.000		451	.000	356	.000		622					
1	.062	451	.0073*		1481	.0563**	421	.0072		858-Q					
2			.0183		UTR	.1167	496	.0144		931-Q					
3			.0293		2190	.1770	541	.0216		2170					
4			.0402		2494	.2373	564	.0288		2474					
5			.0512		2625	.2977	625	.0361		2612					
6			.0622		2672	.3580	622	.0433		2668					
7			.0731		2690			.0504		2688					
8			.0841		2698			.0577		2698					
9			.0951		2702			.0649		2702					
10			.1060		2703			.0721		2702					
11								.1226		2703					
12								.1730		2703					
13								.2235		2703					
14								.2739		2703					
15								.3280		2703					

Gauge No. 6089			Depth 7585'				Clock No. 3100			24 hour						
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.	
0	.000	604	.000		491	.000	455	.000		765						
1	.0033	600	.0067*		987	.0464**	544	.0067		1718						
2	.0065	572	.0167		1649	.0961	616	.0133		2166						
3	.0098	500	.0268		2134	.1458	659	.0200		2449						
4	.0130	491	.0368		2445	.1956	691	.0266		2609						
5			.0468		2616	.2453	729	.0333		2696						
6			.0568		2695	.2950	765	.0400		2730						
7			.0669		2734			.0466		2750						
8			.0769		2756			.0533		2758						
9			.0869		2764			.0599		2760						
10			.0970		2765			.0666		2762						
11								.1132		2762						
12								.1598		2764						
13								.2065		2764						
14								.2531		2764						
15								.3030		2764						
Reading Interval 1			3			15		***						Minutes		

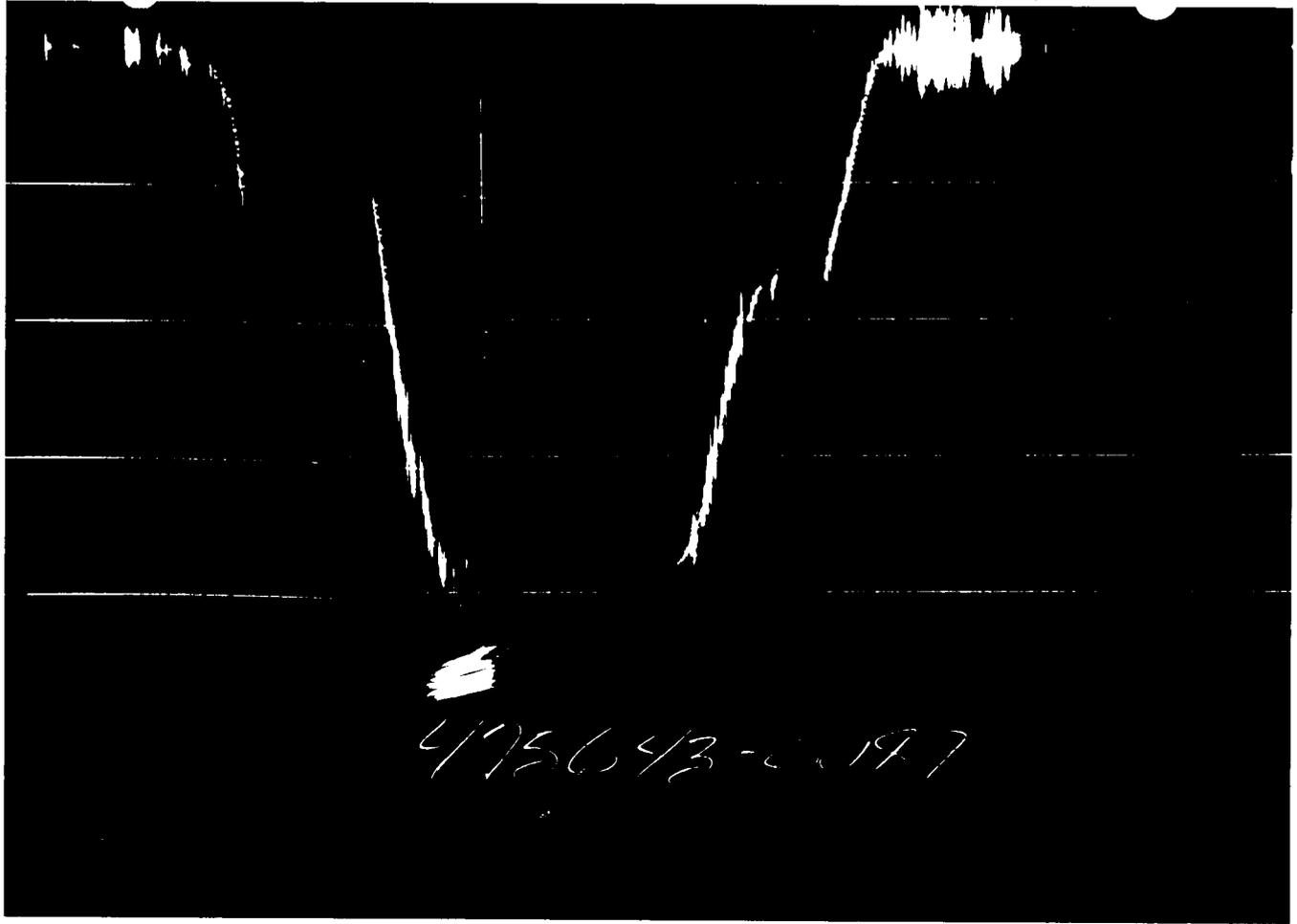
REMARKS: \* = 2 minute interval; \*\* = 14 minute interval; \*\*\* = First 10 intervals are equal to 2 minutes each; the next 4 intervals are equal to 14 minutes each; the last interval is equal to 15 minutes. UTR = Unable to read. Q = Questionable reading... CLOCK INTERMITTENTLY SLIPPING THROUGHOUT TEST OF B.T. #6090.....



	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing .....	6.25"	2.25"	1.03'	
Reversing Sub .....				
Water Cushion Valve .....				
Drill Pipe .....	4 1/2"	3.826"	7149'	
Drill Collars .....	7"	2.375"	226'	
<del>Handling Sub &amp; Choke Assembly</del>	6.0"	2.875"	1.38'	
Dual CIP Valve .....				
Dual CIP Sampler .....	5.03"	.75"	6.40'	7381'
Hydro-Spring Tester .....	5.00"	.75"	5.02'	7386'
Multiple CIP Sampler .....				
Extension Joint .....				
AP Running Case .....	5.00"	2.25"	4.12'	7390'
Hydraulic Jar .....	5.00"	1.75"	5.00'	
VR Safety Joint .....	5.00"	1.00"	2.78'	
Pressure Equalizing Crossover .....				
Packer Assembly .....	5.00"	1.53"	5.08'	7402'
Distributor .....				
Packer Assembly .....	5.00"	1.53"	5.08'	7407'
Flush Joint Anchor .....				
Pressure Equalizing Tube .....				
Blanked-Off B.T. Running Case .....				
Drill Collars .....				
Anchor Pipe Safety Joint .....	5.00"	1.50"	4.30'	
Sub 4 1/2 FH x 4 1/2 IF <del>Packer Assembly</del> .....	6.25"	3.625"	1.13'	
Distributor .....				
Drill Collars .....	7.00"	2.375"	124.00'	
Sub 4 1/2 IF x 4 1/2 FH <del>Packer Assembly</del> .....	6.25"	2.75"	1.12'	
Flush Jt. Anchor .....	5.00"	1.50"	40.00'	
Anchor Pipe Safety Joint .....				
Side Wall Anchor .....				
Blanked-off sub .....	5.00"	2.50"	1.0'	
Drill Collars .....				
Blanked-off Case .....	5.00"	2.25"	4.12'	7585'
Flush Joint Anchor .....	5.00"	1.50"	10.00'	
Blanked-Off B.T. Running Case .....	5.00"	2.44"	4.07'	
Total Depth .....				7600'

PRESSURE

TIME



Each Horizontal Line Equal to 1000 p.s.i.

ANSCHUTZ RANCH  
 Lease Name  
 34-1  
 Well No.  
 7224' - 7400'  
 Tasted Interval  
 THE ANSCHUTZ CORPORATION  
 Lease Owner/Company Name

Legal Location  
 Sec. - Twp. - Rng.  
 34 - 14N - 7E  
 Field Area  
 WILDCAT  
 County  
 SUMMIT  
 State  
 UTAH

FLUID SAMPLE DATA				Date	7-8-78	Ticket Number	475660
Sampler Pressure	1050	P.S.I.G. at Surface		Kind of Job	OPEN HOLE	Halliburton District	ROCK SPRINGS
Recovery: Cu. Ft. Gas	6.94			Tester	MR. ZIMMER	Witness	MR. HARRY
cc. Oil	0			Drilling Contractor	CIRCLE T DRILLING COMPANY #10 PWbcS		
cc. Water	0			EQUIPMENT & HOLE DATA			
cc. Mud	0			Formation Tested	Twin Creek		
Tot. Liquid cc.	0			Elevation	7754'		Ft.
Gravity _____ ° API @ _____ °F.				Net Productive Interval	100'		Ft.
Gas/Oil Ratio _____ cu. ft./bbl.				All Depths Measured From	Kelly Bushing		
		RESISTIVITY	CHLORIDE CONTENT	Total Depth	7400'		Ft.
Recovery Water _____ @ _____ °F. _____ ppm				Main Hole/Casing Size	8 3/4"		
Recovery Mud _____ @ _____ °F. _____ ppm				Drill Collar Length	456' ?? I.D.	2 3/8"	
Recovery Mud Filtrate _____ @ _____ °F. _____ ppm				Drill Pipe Length	6831' ?? I.D.	3.826"	
Mud Pit Sample .4 @ 68 °F. 16,000 ppm				Packer Depth(s)	7219' - 7224'		Ft.
Mud Pit Sample Filtrate .22 @ 68 °F. 3,000 ppm				Depth Tester Valve	7206'		Ft.
Mud Weight 9.0 vis 55 sec				Cushion			
				TYPE	AMOUNT	Depth Back Pres. Valve	Surface Choke 1/2" Bottom Choke .75"
Recovered	663	Feet of	Gas and water cut mud	Remarks			
Recovered		Feet of		SEE PRODUCTION TEST DATA SHEET.			
Recovered		Feet of	TOP Res. .32 @ 68°F 28,000 ppm Filtrate .146 @ 68°F 40,000 ppm				
Recovered		Feet of	MIDDLE Res. .32 @ 68°F 28,000 ppm Filtrate .146 @ 68°F 40,000 ppm				
Recovered		Feet of	BOTTOM Res. .281 @ 68°F 38,000 ppm Filtrate .13 @ 68°F 4,600 ppm				
TEMPERATURE							
	Gauge No. 1767	Gauge No. 235	Gauge No.	TIME			
	Depth: 7208' Ft.	Depth: 7397' Ft.	Depth: Ft.	24 Hour Clock			
Est. °F.	Blanked Off NO	Blanked Off YES	Blanked Off	Tool A.M. Opened 8:34 P.M.			
Actual 136 °F.	Pressures		Pressures		Pressures		Opened A.M. Bypass 9:42 P.M.
	Field	Office	Field	Office	Field	Office	Reported Minutes
Initial Hydrostatic	3516	3493	3633	3589			Computed Minutes
First Period	Flow Initial	630	943-0	869	852		
	Flow Final	778	702	884	871	4	4
	Closed in	2682	2685	2739	2727	30	32
Second Period	Flow Initial	630	705	670	746		
	Flow Final	808	845	869	920	14	12
	Closed in	2632	2685	2739	2729	80	87
Third Period	Flow Initial						
	Flow Final						
	Closed in						
Final Hydrostatic	3487	3464	3618	3555			
	Q = QUESTIONABLE						

Casing perms. \_\_\_\_\_ Bottom choke \_\_\_\_\_ Surf. temp \_\_\_\_\_ °F Ticket No. 475660  
 Gas gravity \_\_\_\_\_ Oil gravity \_\_\_\_\_ GOR \_\_\_\_\_  
 Spec. gravity \_\_\_\_\_ Chlorides \_\_\_\_\_ ppm Res. \_\_\_\_\_ @ \_\_\_\_\_ °F  
 INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED LT-20 MANIFOLD 1/2" Choke

Date Time	7-7-78 a.m. p.m.	Choke Size	Surface Pressure psi	Gas Rate MCF	Liquid Rate BPD	Remarks
11:30 PM						On location
7-8-78						Picked up tool
4:25						
8:00						On bottom, rigged up surface equipment
8:25						Set packer
8:34		1/4" Bubble Hose				Opened tool with a fair blow, increasing
8:35						to a strong blow
8:36			10			Strong blow, increasing
8:38		1/4"	100	168.5		Gas to surface, closed tool
9:08		1/2"	60	466		Opened tool
9:11		"	90	653.8		Gas, no fluid
9:12		"	150	1029.5		"
9:13		"	240	1593.1		"
9:14		"	270	1780.9		"
9:15		"	290	1906.2		"
9:16		"	305	2000.2		"
9:17		"	320	2094.1		"
9:18		"	340	2219.3		"
9:20		"	420	2720.3		"
9:22		"	480	3096		Closed tool
9:42						Opened by-pass, started out of hole
14:00						Broke down tools

Gauge No. 1767			Depth 7208'			Clock No. 2295			24 hour		Ticket No. 475660					
First Flow Period			First Closed In Pressure			Second Flow Period			Second Closed In Pressure			Third Flow Period		Third Closed In Pressure		
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.	
0	.000	943	.000		702	.000	705	.000		845						
1	.014	702	.0135*		2098	.0065	631	.0100**		1911						
2			.0203		2484	.0130	671	.0299		2575						
3			.0270		2604	.0195	738	.0498		2640						
4			.0338		2640	.0260	786	.0698		2661						
5			.0405		2657	.0325	821	.0897		2672						
6			.0473		2664	.0390	845	.1096		2678						
7			.0540		2672			.1296		2682						
8			.0608		2675			.1495		2684						
9			.0675		2678			.1694		2685						
10			.0743		2681			.1893		2685						
11			.0810		2684			.2093		2685						
12			.0878		2684			.2292		2685						
13			.0945		2685			.2491		2685						
14			.1013		2685			.2691		2685						
15			.1080		2685			.2890		2685						

Gauge No. 235			Depth 7397'			Clock No. 2219			24 hour	
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.
0	.0000	852	.0000		871	.0000	746	.0000		920
1	.0120	871	.0131*		2408	.0068	714	.0098**		2076
2			.0197		2598	.0137	713	.0295		2625
3			.0263		2667	.0205	787	.0493		2686
4			.0328		2687	.0273	832	.0688		2709
5			.0394		2699	.0342	874	.0885		2716
6			.0459		2706	.0410	920	.1082		2726
7			.0525		2712			.1278		2731
8			.0591		2715			.1475		2731
9			.0656		2716			.1671		2731
10			.0722		2719			.1868		2729
11			.0787		2720			.2064		2731
12			.0853		2722			.2261		2729
13			.0919		2723			.2458		2729
14			.0984		2725			.2654		2732
15			.1050		2727			.2850		2729

Reading Interval                      2                      2                      6                      Minutes

REMARKS:                      \*Interval = 4 minutes                      \*\*Interval = 3 minutes

10

	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing	6.25"	2.25"	1.03'	
Reversing Sub				
Water Cushion Valve				
Drill Pipe	4.5"	3.826"	6831' ??	
Drill Collars	7"	2.375"	456' ??	
<del>Handling Sub &amp; Choke Assembly</del>	6"	2.875"	1.38'	
Dual CIP Valve				
Dual CIP Sampler	5.03"	.75"	6.40'	
Hydro-Spring Tester	5"	.75"	5.02'	7206'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	2.25"	4.14'	7208'
Hydraulic Jar	5.03"	1.75"	5'	
VR Safety Joint	5"	1"	2.78'	
Pressure Equalizing Crossover				
Packer Assembly ESA 7 3/4"	5"	1.53"	5.08'	7219'
Distributor				
Packer Assembly ESA 7 3/4"	5"	1.53"	5.08'	7224'
Flush Joint Anchor				
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case				
Drill Collars				
Anchor Pipe Safety Joint	5.75"	1.50"	4'	
Sub 4 1/2" FH X 4 1/2" IF	6.25"	3.625"	1.13'	
Packer Assembly				
Distributor				
Packer Assembly				
Anchor Pipe Safety Joint				
Side Wall Anchor				
Drill Collars	7"	2.375"	124'	
Sub 4 1/2" IF X 4 1/2" FH	6.25"	2.75"	1.12'	
Flush Joint Anchor	5.75"	3.75"	40'	
Blanked-Off B.T. Running Case	5.75"	3.50"	4.12'	7397'
Total Depth				7400'

# DOUBLE "D" ENTERPRISES

B.O.P. Test Report

B.O.P. TEST PERFORMED ON (DATE) 2-27-84

OIL CO.: AMOCO

WELL NAME & NUMBER ANSCHUTZ RANCH # 34-1 ✓

SECTION 34

TOWNSHIP 4N

RANGE 7E

COUNTY SUMMIT, UTAH

DRILLING CONTRACTOR PENNANT # 7

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.**  
712 Morse Lee Street  
Evanston, Wyoming 82930  
Phone: (307) 789-9213 or (307) 789-9214

OIL CO. SITE REPRESENTATIVE LARRY HUMPHREY

RIG TOOL PUSHER TOM MCKENZIE

TESTED OUT OF EVANSTON

NOTIFIED PRIOR TO TEST: .....

COPIES OF THIS TEST REPORT SENT COPIES TO: SITE REP

B.L.M.

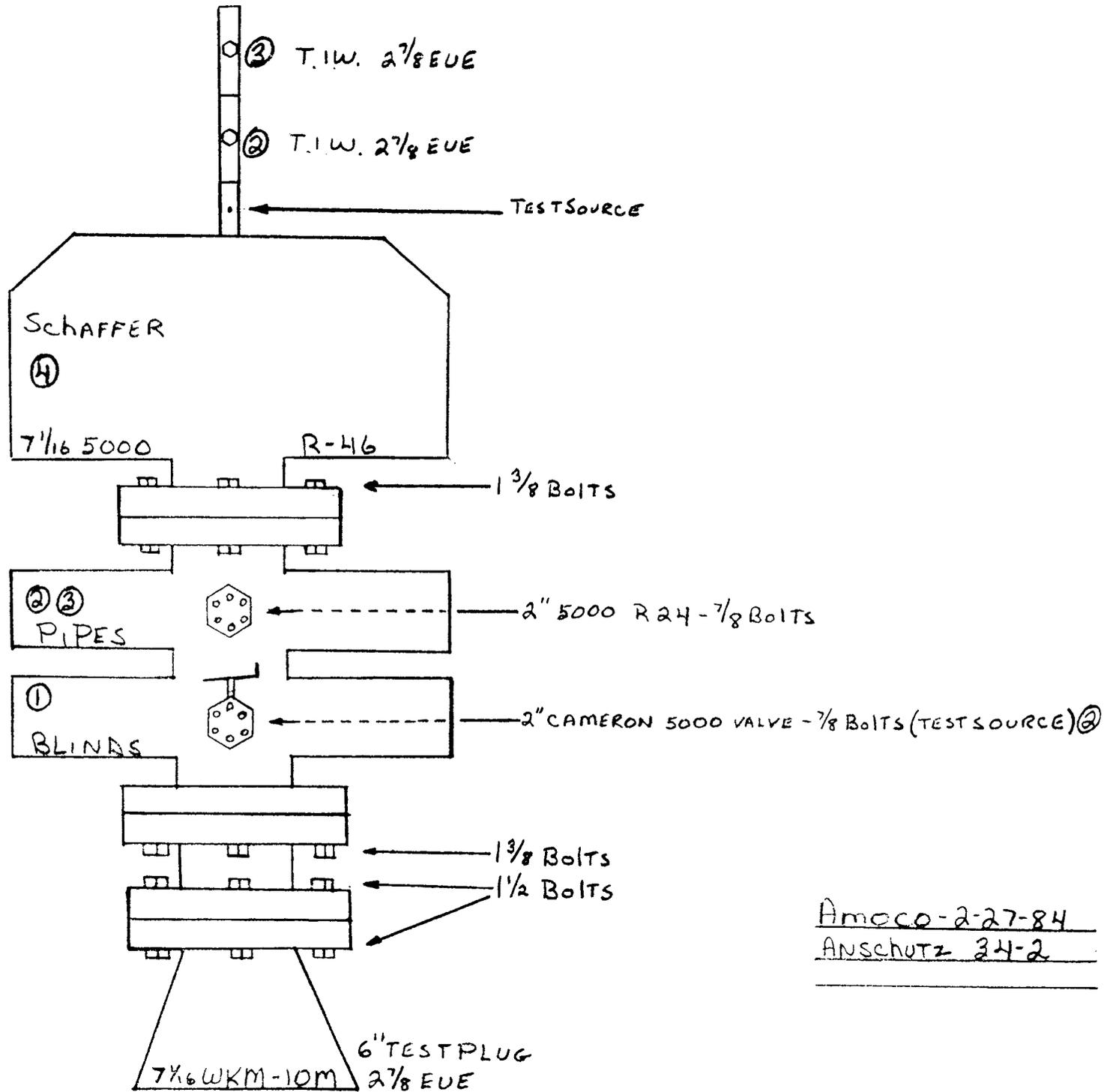
USGS

ORIGINAL CHART & TEST REPORT ON FILE AT: EVANSTON, WYO.....OFFICE

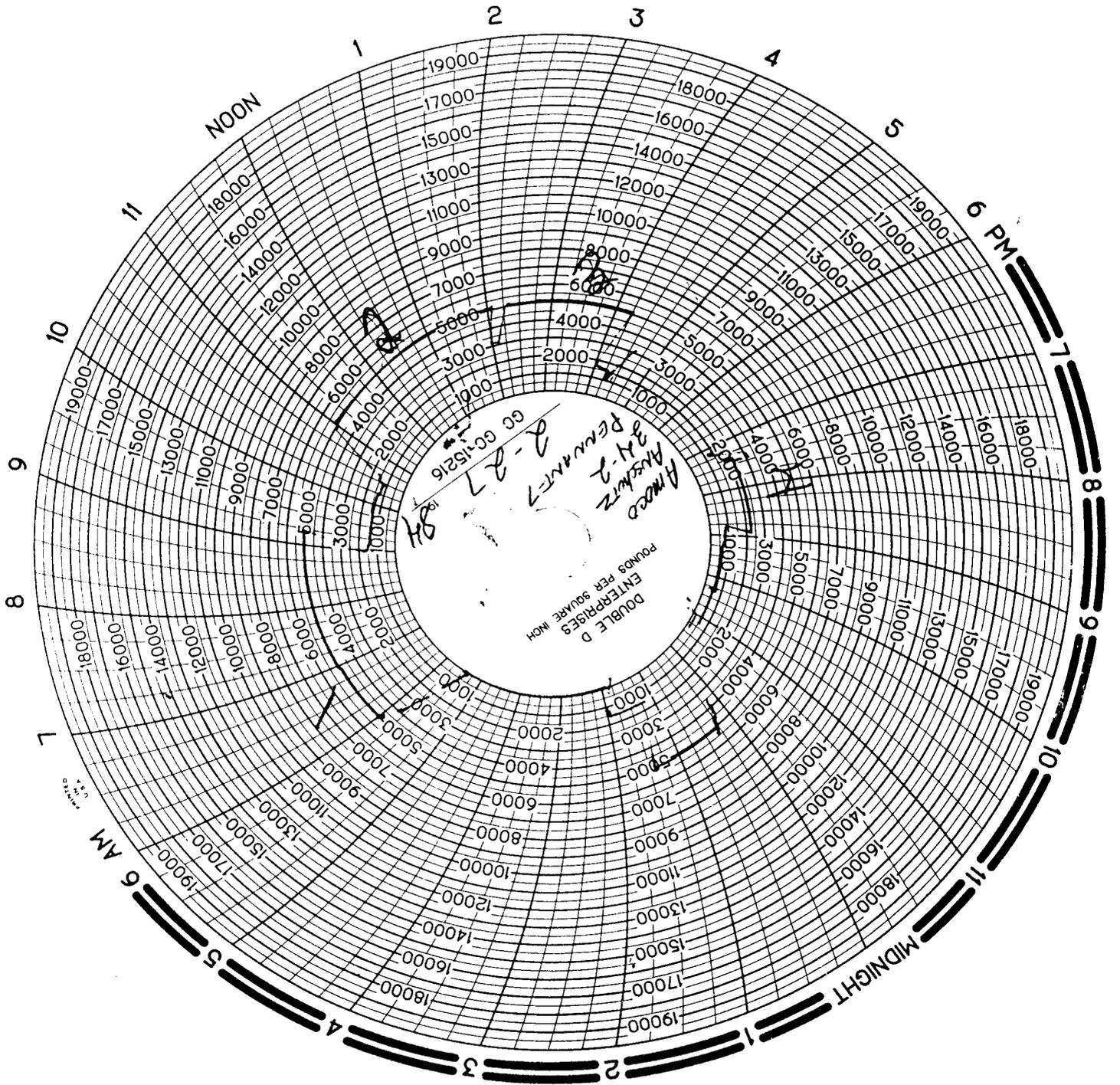
Company	Lease and Well Name #	Date of test	Rig #
AMOCO	ANSCHUTZ RANCH #342	2-27-84	PENNANT #7

TEST #	Time	
	1:30 - 2:45	TRAVEL TO RIG
	2:45 -	RIG TRYING TO PRESSURE UPON CSG, TREE STILL INSTALLED - NO IRON STACKED, CLEANED RING GROOVES + PREPED NUTS + STUDS, NIPPLED
	5:45	UP STACK
	5:45 -	RIG UP TRUCK F/TESTS - SET PLUG - FILL STACK WITH 5 GALLON BUCKETS
①	5:52 - 5:58	5000 - NO TEST (SEE DIAGRAM F/ITEMS TESTED)
	5:58 - 6:20	TIGHTEN FLANGES
RR. ①	6:20 - 6:35	5000 - O.K.
	6:35 - 6:45	STAB PLUG CLOSE PIPES, FILL TUBING + T.I.W.S + CLOSE
②	6:45 - 7:00	5000 O.K. 1ST TIW
③	7:02 - 7:07	5000 O.K. 2ND TIW
	7:07 - 7:10	WORK HYDRIL + CLOSE
④	7:10 - 7:12	2500 - NO TEST
	7:12 - 7:30	TIGHTEN FLANGE
RR. ④	7:30 - 7:45	2500 - O.K.
	7:45 - 8:00	LOAD TRUCK - RIG DOWN - MAKE OUT TICKET
	8:00 - 9:30	TRAVEL HOME - UNLOAD RIG

ACCUMULATOR 1450 PSI  
MANIFOLD 1400 PSI  
ANNULAR 1450 PSI



Amoco-2-27-84  
ANSCHUTZ 34-2



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

FORM 9

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		5. LEASE DESIGNATION AND SERIAL NUMBER: <b>Fee</b>
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.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: <b>n/a</b>
		7. UNIT or CA AGREEMENT NAME: <b>n/a</b>
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____	8. WELL NAME and NUMBER: <b>Anschutz Ranch 34-1</b>	
2. NAME OF OPERATOR: <b>The Anschutz Corporation</b>		9. API NUMBER: <b>4304330076</b>
3. ADDRESS OF OPERATOR: <b>555 17th Street, Suite 2400</b> CITY <b>Denver</b> STATE <b>CO</b> ZIP <b>80202</b>	PHONE NUMBER: <b>(303) 298-1000</b>	10. FIELD AND POOL, OR WILDCAT: <b>Anschutz Ranch</b>
4. LOCATION OF WELL FOOTAGES AT SURFACE: <b>1949' FSL, 1923' FEL</b>		COUNTY: <b>Summit</b>
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>NWSE 34 4N 7E</b>		STATE: <b>UTAH</b>

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: <b>3/19/2007</b>	<input checked="" type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input checked="" type="checkbox"/> REPERFORATE CURRENT FORMATION
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion:	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

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

The Anschutz Corporation proposes to perforate and acidize the currently producing Twin Creek formation in the Anschutz Ranch 34-1 well. The proposed 140 perforations will be shot at 2 spf over the gross interval 6,454' - 6,804' (140' net). The perforations will then be acid stimulated. The proposed perforation intervals are as follows:

6454' - 6458'	6660' - 6676'
6508' - 6510'	6696' - 6704'
6520' - 6523'	6710' - 6718'
6528' - 6532'	6729' - 6740'
6544' - 6555'	6744' - 6757'
6586' - 6598'	6782' - 6786'
6616' - 6650'	6794' - 6804'

Verbal approval for this operation was given by Dan Jarvis of the Utah Division of Oil, Gas, and Mining on March 16, 2006.

COPY SENT TO OPERATOR  
Date: 3/20/07  
Initials: CRD

NAME (PLEASE PRINT) <u>Eric L. Root</u>	TITLE <u>Engineering Manager</u>
SIGNATURE	DATE <u>3/16/2007</u>

(This space for State use only)

**APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING**

DATE: 3/20/07  
BY: [Signature] (See Instructions on Reverse Side)

(5/2000)

**RECEIVED**  
**MAR 19 2007**  
DIV. OF OIL, GAS & MINING

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

FORM 9

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		5. LEASE DESIGNATION AND SERIAL NUMBER: Fee
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.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: n/a
		7. UNIT or CA AGREEMENT NAME: n/a
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____		8. WELL NAME and NUMBER: Anschutz Ranch 34-1
2. NAME OF OPERATOR: The Anschutz Corporation		9. API NUMBER: 4304330076
3. ADDRESS OF OPERATOR: 555 17th Street, Suite 2400 CITY Denver STATE CO ZIP 80202		10. FIELD AND POOL, OR WILDCAT: Anschutz Ranch
PHONE NUMBER: (303) 298-1000		
4. LOCATION OF WELL		
FOOTAGES AT SURFACE: 1949' FSL, 1923' FEL		COUNTY: Summit
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWSE 34 4N 7E		STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will start: _____	<input checked="" type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input checked="" type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of work completion: 3/22/2007	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

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

The Anschutz Corporation has perforated and acidized the currently producing Twin Creek formation in the Anschutz Ranch 34-1 well. The 140 perforations were shot at 2 spf over the gross interval 6,453' - 6,804' (138' net). The perforations were then acid-stimulated with 8000 gallons 15% HCl. The perforation intervals are as follows:

- |               |               |
|---------------|---------------|
| 6453' - 6557' | 6660' - 6676' |
| 6507' - 6509' | 6696' - 6704' |
| 6519' - 6522' | 6710' - 6716' |
| 6527' - 6531' | 6729' - 6740' |
| 6543' - 6554' | 6744' - 6757' |
| 6585' - 6597' | 6782' - 6786' |
| 6616' - 6650' | 6794' - 6804' |

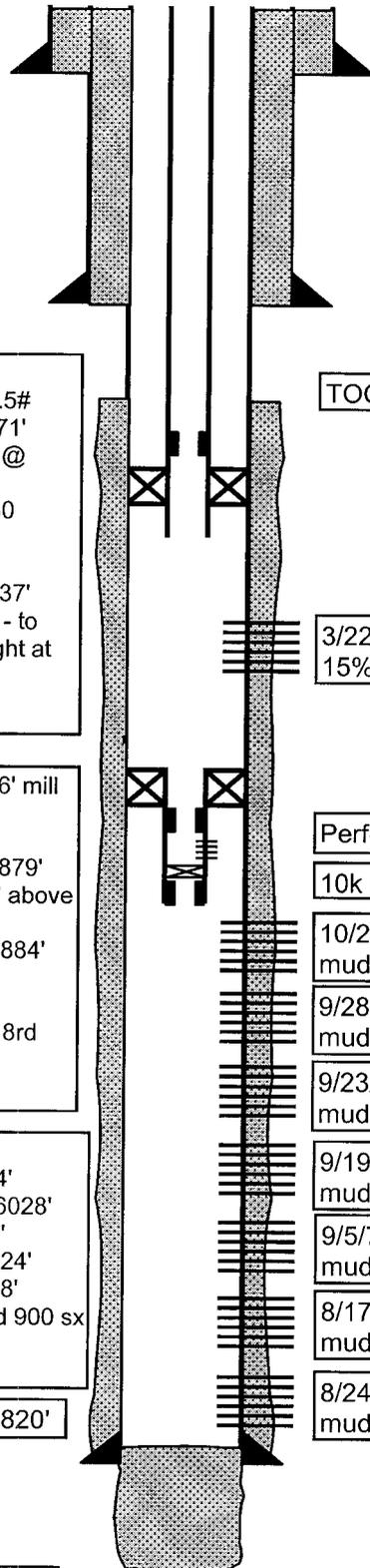
Verbal approval for this operation was given by Dan Jarvis of the Utah Division of Oil, Gas, and Mining on March 16,2007.

NAME (PLEASE PRINT) <u>James P. Oursland</u>	TITLE <u>Vice President of Engineering &amp; Operations</u>
SIGNATURE	DATE <u>8/15/2008</u>

(This space for State use only)

# ANSCHUTZ RANCH 34-1

API	43-043-30076	Section	34	Township	4N	Range	7E	Footage	1949' FSL 1923' FEL
County	Summit	State	Utah			Spud Date	May 29, 1978		
Ground Elev.	7,754'	KB Elev.	7,768'	Current as of		March 28, 2007			



20" conductor @ 120'

17-1/2" Hole  
56 jts 13-3/8" 54 & 61# J-55 8rd csg @ 2,200'  
Cmt w/ 1500 sx HLC and 300 sx Class 'G'

TOC: 5,804'

\* KB @ 12'  
\* 203 jts (6231.71') 2-7/8" 6.5# N80 8rd ABC tbg to 6243.71'  
\* 1.30" x 2.31" ID "X" nipple @ 6243.71'  
\* 1 jt (30.36') 2-7/8" 6.5# N80 8rd ABC tbg to 6275.37'  
\* 6.85' x 4.5" Weatherford ArrowSet X-1 pkr @ 6275.37' set w/ 8000# compression - to release PU 1 turn to the right at pkr

3/22/07 - perforate 6453' - 6804', acidize w 8000 gal 15% HCl, tested 67 Mcfd

Baker FB-1 pkr @ 6,860' w/ 6' mill out extension  
10' pup joint  
2.31" Baker "F" Nipple @ 6,879'  
4' pup joint (with CIBP set 2' above "R" Nipple)  
2.25" Baker "R" Nipple @ 6,884'  
2' pup joint  
bottom of tubing @ 6886'  
all tubing is 2-7/8" 6.5# N80 8rd ABC

Perforations in pup joints below pkr (5 shots)

10k psi Plugwell CIBP set @ 6898' WL

7-3/4" Hole  
3 jts 5-1/2" P-110 20# to 124'  
143 5-1/2" jts K-55 15.5# to 6028'  
3 jts 5-1/2" K-55 17# to 6157'  
11 jts 5-1/2" P-110 20# to 6624'  
31 jts 5-1/2" K-55 17# to 7828'  
Cmt w/ 150 sx 65-35 poz and 900 sx 50-50 poz

10/2/78 - perforate 6981' - 7032', acidize w 5000 gal mud acid, tested 10.2 MMcfd

9/28/78 - perforate 7060' - 7184', acidize w/5000 gal mud acid, tested 9.7 MMcfd

9/23/78 - perforate 7234' - 7290', acidize w/ 5000 gal mud acid, tested 8.9 MMcfd

9/19/78 - perforate 7276' - 7410', acidize w/ 5000 gal mud acid, tested 5.6 MMcfd

9/5/78 - perforate 7517' - 7571', acidize w/ 9000 gal mud acid, tested 2.7 MMcfd

8/17/78 - perforate 7604' - 7700', acidize w/ 3000 gal mud acid, tested 600 Mcfd, 85% from 7604' - 7618'

8/24/78 - perforate 7816' - 7820', acidize w/ 1500 gal mud acid, trace of gas and oil

PBTD: 7,820'

TD: 8,190'

# ANSCHUTZ RANCH 34-1

API	43-043-30076	Section	34	Township	4N	Range	7E	Footage	1949' FSL 1923' FEL	
County	Summit	State	Utah				Spud Date	May 29, 1978		
Ground Elev.	7,754'	KB Elev.	7,768'	Current as of			March 28, 2007			

### Geologic Markers

Formation	Measured Depth
Pruess Salt	6,350'
Twin Creek	6,438'
Walton Creek	7,090'
Boundary Butte	7,448'
Rich Member	7,497'
Slide Rock	7792'

### Drill Stem Tests

Test #	Depth	Recovered
1	7,224' - 7,400'	663' G&WCM
2	7,407' - 7,600'	832' GCM
3	7,616' - 7,770'	60' M
4	7,755' - 7,931'	279' SGCM
5	7,941' - 8,023'	4,480' GCW

### Completions

From	To	Stimulation	IP Rate
6453	- 6457		67 MCFD
6507	- 6539		
6519	- 6522		
6527	- 6531		
6543	- 6554		
6585	- 6597		
6616	- 6650		
6660	- 6676		
6696	- 6704		
6710	- 6718		
6729	- 6740		
6744	- 6757		
6782	- 6786		
6794	- 6804		
6981	- 6984		10,264 MCFD
6989	- 7003		
7018	- 7026		
7030	- 7032		
7060	- 7072		9,729 MCFD
7094	- 7098		
7100	- 7110		
7138	- 7141		
7178	- 7184		
7234	- 7240		8,892 MCFD
7247	- 7249		
7255	- 7258		
7267	- 7277		
7285	- 7290		
7276	- 7282		5,622 MCFD
7406	- 7410		

# ANSCHUTZ RANCH 34-1

API	43-043-30076	Section	34	Township	4N	Range	7E	Footage	1949' FSL 1923' FEL	
County	Summit	State	Utah				Spud Date	May 29, 1978		
Ground Elev.	7,754'	KB Elev.	7,768'	Current as of			March 28, 2007			

**Completions**

From	To	Stimulation	IP Rate
7515	- 7517	 Acidize w 9000 gal mud acid	2,701 MCFD
7522	- 7524		
7531	- 7535		
7538	- 7540		
7544	- 7546		
7555	- 7557		
7565	- 7567		
7569	- 7571		
7604	- 7618	 Acidize w 3000 gal mud acid	600 MCFD
7657	- 7667		
7670	- 7672		
7674	- 7676		
7679	- 7681		
7693	- 7695		
7698	- 7700		
7816	- 7820	Acidize w 1500 gal mud acid	Trace gas, oil

10-13-78 24 hour flow tested at 13.038 MMSCFD, 242 BOPD, 26 BWPD

4-30-80 Flow tested at 7.255 MMSCFD, 301BOPD



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\*-----SCHLUMBERGER-----\*  
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*43-043-30076*

SCHLUMBERGER DIRECTIONAL SURVEY

ANSCHUTZ CORPORATION

ANSCHUTZ 34-1

WILDCAT

SUMMIT COUNTY, UTAH

RUN NO. 1      2222 - 8168

JULY 21, 1978

START OF SURVEY IS CASING AT 2222 FT.

TANGENTIAL METHOD

REFERENCE JOB 4450.

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* DEPTH	* DEVIATION	* AZIMUTH	* TRUE	* VERTICAL	* CO-ORDINATES	* COURSE
* FEET	* DEGREES	* DEGREES	* DEPTH	* DEPTH	* + NORTH * + EAST	* LENGTH
			* FEET		* - SOUTH * - WEST	* FEET
* 2222.0	* 1.2	* 31.0	* 2222.0	* 0.0	* 0.0	* 0.0
* 2230.0	* 1.2	* 344.0	* 2230.0	* 0.2	* -0.0	* 0.2
* 2240.0	* 1.3	* 242.0	* 2240.0	* 0.1	* -0.2	* 0.3
* 2250.0	* 1.2	* 249.0	* 2250.0	* -0.0	* -0.4	* 0.4
* 2260.0	* 1.2	* 248.0	* 2260.0	* -0.1	* -0.6	* 0.6
* 2270.0	* 1.2	* 247.0	* 2270.0	* -0.2	* -0.8	* 0.8
* 2280.0	* 1.2	* 251.0	* 2280.0	* -0.2	* -1.0	* 1.1
* 2290.0	* 1.2	* 249.0	* 2290.0	* -0.3	* -1.2	* 1.3
* 2300.0	* 1.0	* 254.0	* 2300.0	* -0.4	* -1.4	* 1.4
* 2310.0	* 0.7	* 255.0	* 2310.0	* -0.4	* -1.5	* 1.6
* 2320.0	* 0.6	* 253.0	* 2320.0	* -0.4	* -1.6	* 1.7
* 2330.0	* 0.5	* 259.0	* 2330.0	* -0.5	* -1.7	* 1.8
* 2340.0	* 0.5	* 277.0	* 2340.0	* -0.4	* -1.8	* 1.8
* 2350.0	* 0.6	* 259.0	* 2350.0	* -0.5	* -1.9	* 1.9
* 2360.0	* 0.8	* 262.0	* 2360.0	* -0.5	* -2.0	* 2.1
* 2370.0	* 0.8	* 265.0	* 2370.0	* -0.5	* -2.2	* 2.2
* 2380.0	* 1.0	* 259.0	* 2380.0	* -0.5	* -2.3	* 2.4
* 2390.0	* 1.0	* 259.0	* 2390.0	* -0.6	* -2.5	* 2.6
* 2400.0	* 1.0	* 258.0	* 2400.0	* -0.6	* -2.7	* 2.7
* 2410.0	* 1.0	* 256.0	* 2410.0	* -0.6	* -2.8	* 2.9
* 2420.0	* 1.0	* 254.0	* 2420.0	* -0.7	* -3.0	* 3.1
* 2430.0	* 0.8	* 250.0	* 2430.0	* -0.7	* -3.1	* 3.2
* 2440.0	* 0.9	* 247.0	* 2440.0	* -0.8	* -3.3	* 3.4
* 2450.0	* 0.9	* 250.0	* 2450.0	* -0.8	* -3.4	* 3.5
* 2460.0	* 1.0	* 242.0	* 2460.0	* -0.9	* -3.6	* 3.7
* 2470.0	* 0.9	* 245.0	* 2470.0	* -1.0	* -3.7	* 3.9
* 2480.0	* 1.0	* 237.0	* 2480.0	* -1.1	* -3.9	* 4.0
* 2490.0	* 1.0	* 235.0	* 2490.0	* -1.2	* -4.0	* 4.2
* 2500.0	* 0.9	* 234.0	* 2500.0	* -1.3	* -4.1	* 4.3
* 2510.0	* 0.9	* 235.0	* 2510.0	* -1.4	* -4.3	* 4.5
* 2520.0	* 1.0	* 229.0	* 2520.0	* -1.5	* -4.4	* 4.7
* 2530.0	* 0.9	* 234.0	* 2530.0	* -1.6	* -4.5	* 4.8
* 2540.0	* 1.0	* 226.0	* 2540.0	* -1.7	* -4.7	* 5.0
* 2550.0	* 1.0	* 230.0	* 2550.0	* -1.8	* -4.8	* 5.1
* 2560.0	* 1.0	* 229.0	* 2560.0	* -1.9	* -4.9	* 5.3
* 2570.0	* 0.7	* 227.0	* 2570.0	* -2.0	* -5.0	* 5.4
* 2580.0	* 0.8	* 227.0	* 2580.0	* -2.1	* -5.1	* 5.5
* 2590.0	* 0.8	* 226.0	* 2589.9	* -2.2	* -5.2	* 5.7
* 2600.0	* 0.7	* 229.0	* 2599.9	* -2.3	* -5.3	* 5.8
* 2610.0	* 0.8	* 230.0	* 2609.9	* -2.4	* -5.4	* 5.9
* 2620.0	* 0.6	* 231.0	* 2619.9	* -2.5	* -5.5	* 6.0
* 2630.0	* 0.8	* 228.0	* 2629.9	* -2.6	* -5.6	* 6.2
* 2640.0	* 0.7	* 221.0	* 2639.9	* -2.6	* -5.7	* 6.3
* 2650.0	* 0.8	* 227.0	* 2649.9	* -2.7	* -5.8	* 6.4
* 2660.0	* 0.9	* 228.0	* 2659.9	* -2.8	* -5.9	* 6.6
* 2670.0	* 0.8	* 225.0	* 2669.9	* -2.9	* -6.0	* 6.7

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* DEPTH	* DEVIATION	* AZIMUTH	* TRUE	* CO-ORDINATES	* COURSE
* FEET	* DEGREES	* DEGREES	* VERTICAL	* + NORTH * + EAST	* LENGTH
			* DEPTH	* - SOUTH * - WEST	* FEET
			* FEET		
* 2680.0	* 0.9	* 229.0	* 2679.9	* -3.0 * -6.1	* 6.9
* 2690.0	* 0.9	* 229.0	* 2689.9	* -3.2 * -6.3	* 7.0
* 2700.0	* 0.9	* 228.0	* 2699.9	* -3.3 * -6.4	* 7.2
* 2710.0	* 1.0	* 231.0	* 2709.9	* -3.4 * -6.5	* 7.3
* 2720.0	* 1.0	* 235.0	* 2719.9	* -3.5 * -6.7	* 7.5
* 2730.0	* 0.8	* 232.0	* 2729.9	* -3.6 * -6.8	* 7.6
* 2740.0	* 1.0	* 234.0	* 2739.9	* -3.7 * -6.9	* 7.8
* 2750.0	* 1.0	* 234.0	* 2749.9	* -3.8 * -7.1	* 8.0
* 2760.0	* 0.9	* 232.0	* 2759.9	* -3.9 * -7.2	* 8.1
* 2770.0	* 1.0	* 239.0	* 2769.9	* -3.9 * -7.3	* 8.3
* 2780.0	* 1.0	* 237.0	* 2779.9	* -4.0 * -7.5	* 8.5
* 2790.0	* 0.8	* 238.0	* 2789.9	* -4.1 * -7.6	* 8.6
* 2800.0	* 1.1	* 236.0	* 2799.9	* -4.2 * -7.7	* 8.8
* 2810.0	* 1.1	* 241.0	* 2809.9	* -4.3 * -7.9	* 9.0
* 2820.0	* 1.0	* 246.0	* 2819.9	* -4.4 * -8.1	* 9.2
* 2830.0	* 1.2	* 238.0	* 2829.9	* -4.5 * -8.3	* 9.4
* 2840.0	* 1.2	* 245.0	* 2839.9	* -4.6 * -8.4	* 9.6
* 2850.0	* 1.2	* 243.0	* 2849.9	* -4.7 * -8.6	* 9.8
* 2860.0	* 1.2	* 244.0	* 2859.9	* -4.8 * -8.8	* 10.0
* 2870.0	* 1.2	* 246.0	* 2869.9	* -4.9 * -9.0	* 10.2
* 2880.0	* 1.2	* 247.0	* 2879.9	* -4.9 * -9.2	* 10.4
* 2890.0	* 1.2	* 247.0	* 2889.9	* -5.0 * -9.4	* 10.7
* 2900.0	* 1.3	* 249.0	* 2899.9	* -5.1 * -9.6	* 10.9
* 2910.0	* 1.2	* 251.0	* 2909.9	* -5.2 * -9.8	* 11.1
* 2920.0	* 1.3	* 252.0	* 2919.9	* -5.2 * -10.0	* 11.3
* 2930.0	* 1.4	* 254.0	* 2929.9	* -5.3 * -10.3	* 11.5
* 2940.0	* 1.2	* 255.0	* 2939.9	* -5.4 * -10.5	* 11.8
* 2950.0	* 1.3	* 258.0	* 2949.9	* -5.4 * -10.7	* 12.0
* 2960.0	* 1.3	* 256.0	* 2959.9	* -5.5 * -10.9	* 12.2
* 2970.0	* 1.4	* 252.0	* 2969.9	* -5.5 * -11.1	* 12.4
* 2980.0	* 1.4	* 254.0	* 2979.9	* -5.6 * -11.4	* 12.7
* 2990.0	* 1.3	* 255.0	* 2989.9	* -5.7 * -11.6	* 12.9
* 3000.0	* 1.3	* 259.0	* 2999.9	* -5.7 * -11.8	* 13.1
* 3010.0	* 1.3	* 261.0	* 3009.9	* -5.7 * -12.0	* 13.3
* 3020.0	* 1.2	* 263.0	* 3019.9	* -5.8 * -12.2	* 13.5
* 3030.0	* 1.2	* 265.0	* 3029.9	* -5.8 * -12.4	* 13.7
* 3040.0	* 1.2	* 262.0	* 3039.9	* -5.8 * -12.7	* 13.9
* 3050.0	* 1.2	* 262.0	* 3049.9	* -5.9 * -12.9	* 14.1
* 3060.0	* 1.2	* 263.0	* 3059.9	* -5.9 * -13.1	* 14.3
* 3070.0	* 1.2	* 270.0	* 3069.9	* -5.9 * -13.3	* 14.5
* 3080.0	* 1.3	* 265.0	* 3079.9	* -5.9 * -13.5	* 14.7
* 3090.0	* 1.2	* 268.0	* 3089.9	* -5.9 * -13.7	* 14.9
* 3100.0	* 1.4	* 267.0	* 3099.9	* -5.9 * -14.0	* 15.2
* 3110.0	* 1.6	* 263.0	* 3109.8	* -6.0 * -14.2	* 15.4
* 3120.0	* 1.4	* 264.0	* 3119.8	* -6.0 * -14.5	* 15.7
* 3130.0	* 1.6	* 265.0	* 3129.8	* -6.0 * -14.8	* 15.9

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* DEPTH	* DEVIATION	* AZIMUTH	* VERTICAL	* CO-ORDINATES			* COURSE
* FEET	* DEGREES	* DEGREES	* DEPTH	* + NORTH	* + EAST	* - SOUTH	* - WEST
* FEET			* FEET				* FEET
* 3140.0	* 1.5	* 265.0	* 3139.8	* -6.0	* -15.0	* 16.2	*
* 3150.0	* 1.5	* 267.0	* 3149.8	* -6.0	* -15.3	* 16.4	*
* 3160.0	* 1.6	* 267.0	* 3159.8	* -6.1	* -15.6	* 16.7	*
* 3170.0	* 1.6	* 268.0	* 3169.8	* -6.1	* -15.8	* 17.0	*
* 3180.0	* 1.6	* 267.0	* 3179.8	* -6.1	* -16.1	* 17.2	*
* 3190.0	* 1.6	* 271.0	* 3189.8	* -6.1	* -16.4	* 17.5	*
* 3200.0	* 1.7	* 269.0	* 3199.8	* -6.1	* -16.7	* 17.8	*
* 3210.0	* 1.8	* 269.0	* 3209.8	* -6.1	* -17.0	* 18.1	*
* 3220.0	* 1.7	* 269.0	* 3219.8	* -6.1	* -17.3	* 18.3	*
* 3230.0	* 1.6	* 268.0	* 3229.8	* -6.1	* -17.6	* 18.6	*
* 3240.0	* 1.8	* 265.0	* 3239.8	* -6.1	* -17.9	* 18.9	*
* 3250.0	* 1.8	* 265.0	* 3249.8	* -6.2	* -18.2	* 19.2	*
* 3260.0	* 1.8	* 264.0	* 3259.8	* -6.2	* -18.5	* 19.5	*
* 3270.0	* 1.9	* 266.0	* 3269.8	* -6.2	* -18.9	* 19.8	*
* 3280.0	* 1.9	* 265.0	* 3279.8	* -6.2	* -19.2	* 20.2	*
* 3290.0	* 1.8	* 262.0	* 3289.8	* -6.3	* -19.5	* 20.5	*
* 3300.0	* 1.9	* 268.0	* 3299.8	* -6.3	* -19.8	* 20.8	*
* 3310.0	* 1.7	* 267.0	* 3309.8	* -6.3	* -20.1	* 21.1	*
* 3320.0	* 1.6	* 265.0	* 3319.8	* -6.3	* -20.4	* 21.4	*
* 3330.0	* 1.6	* 264.0	* 3329.8	* -6.4	* -20.7	* 21.6	*
* 3340.0	* 1.7	* 268.0	* 3339.7	* -6.4	* -21.0	* 21.9	*
* 3350.0	* 1.9	* 273.0	* 3349.7	* -6.4	* -21.3	* 22.2	*
* 3360.0	* 2.0	* 273.0	* 3359.7	* -6.3	* -21.7	* 22.6	*
* 3370.0	* 2.1	* 269.0	* 3369.7	* -6.3	* -22.0	* 22.9	*
* 3380.0	* 2.1	* 264.0	* 3379.7	* -6.4	* -22.4	* 23.3	*
* 3390.0	* 2.1	* 268.0	* 3389.7	* -6.4	* -22.7	* 23.6	*
* 3400.0	* 2.0	* 270.0	* 3399.7	* -6.4	* -23.1	* 24.0	*
* 3410.0	* 2.0	* 269.0	* 3409.7	* -6.4	* -23.4	* 24.3	*
* 3420.0	* 2.0	* 267.0	* 3419.7	* -6.4	* -23.8	* 24.6	*
* 3430.0	* 2.0	* 271.0	* 3429.7	* -6.4	* -24.1	* 25.0	*
* 3440.0	* 2.2	* 272.0	* 3439.7	* -6.4	* -24.5	* 25.4	*
* 3450.0	* 2.2	* 271.0	* 3449.7	* -6.4	* -24.9	* 25.7	*
* 3460.0	* 2.3	* 268.0	* 3459.7	* -6.4	* -25.3	* 26.1	*
* 3470.0	* 2.2	* 267.0	* 3469.7	* -6.4	* -25.7	* 26.5	*
* 3480.0	* 2.3	* 266.0	* 3479.7	* -6.5	* -26.1	* 26.9	*
* 3490.0	* 2.4	* 268.0	* 3489.6	* -6.5	* -26.5	* 27.3	*
* 3500.0	* 2.3	* 266.0	* 3499.6	* -6.5	* -26.9	* 27.7	*
* 3510.0	* 2.4	* 266.0	* 3509.6	* -6.5	* -27.3	* 28.1	*
* 3520.0	* 2.2	* 266.0	* 3519.6	* -6.6	* -27.7	* 28.5	*
* 3530.0	* 2.4	* 266.0	* 3529.6	* -6.6	* -28.1	* 28.9	*
* 3540.0	* 2.4	* 264.0	* 3539.6	* -6.6	* -28.6	* 29.3	*
* 3550.0	* 2.2	* 270.0	* 3549.6	* -6.6	* -28.9	* 29.7	*
* 3560.0	* 2.0	* 266.0	* 3559.6	* -6.7	* -29.3	* 30.0	*
* 3570.0	* 2.0	* 267.0	* 3569.6	* -6.7	* -29.6	* 30.4	*
* 3580.0	* 2.1	* 266.0	* 3579.6	* -6.7	* -30.0	* 30.7	*
* 3590.0	* 2.0	* 267.0	* 3589.6	* -6.7	* -30.3	* 31.1	*

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* DEPTH *	* DEVIATION *	* AZIMUTH *	* VERTICAL *	* CO-ORDINATES *		* COURSE *	
* FEET *	* DEGREES *	* DEGREES *	* DEPTH *	* + NORTH *	* + EAST *	* LENGTH *	
			* FEET *	* - SOUTH *	* - WEST *	* FEET *	
*****							
* 3600.0 *	* 2.2 *	* 271.0 *	* 3599.6 *	* -6.7 *	* -30.7 *	* 31.5 *	
* 3610.0 *	* 2.4 *	* 272.0 *	* 3609.6 *	* -6.7 *	* -31.1 *	* 31.9 *	
* 3620.0 *	* 2.6 *	* 268.0 *	* 3619.5 *	* -6.7 *	* -31.6 *	* 32.3 *	
* 3630.0 *	* 2.6 *	* 265.0 *	* 3629.5 *	* -6.7 *	* -32.1 *	* 32.8 *	
* 3640.0 *	* 2.5 *	* 264.0 *	* 3639.5 *	* -6.8 *	* -32.5 *	* 33.2 *	
* 3650.0 *	* 2.5 *	* 265.0 *	* 3649.5 *	* -6.8 *	* -32.9 *	* 33.6 *	
* 3660.0 *	* 2.4 *	* 269.0 *	* 3659.5 *	* -6.8 *	* -33.3 *	* 34.0 *	
* 3670.0 *	* 2.1 *	* 268.0 *	* 3669.5 *	* -6.9 *	* -33.7 *	* 34.4 *	
* 3680.0 *	* 2.2 *	* 267.0 *	* 3679.5 *	* -6.9 *	* -34.1 *	* 34.8 *	
* 3690.0 *	* 2.2 *	* 268.0 *	* 3689.5 *	* -6.9 *	* -34.5 *	* 35.2 *	
* 3700.0 *	* 2.3 *	* 269.0 *	* 3699.5 *	* -6.9 *	* -34.9 *	* 35.5 *	
* 3710.0 *	* 2.5 *	* 272.0 *	* 3709.5 *	* -6.9 *	* -35.3 *	* 36.0 *	
* 3720.0 *	* 2.7 *	* 271.0 *	* 3719.5 *	* -6.9 *	* -35.8 *	* 36.4 *	
* 3730.0 *	* 2.7 *	* 268.0 *	* 3729.4 *	* -6.9 *	* -36.3 *	* 36.9 *	
* 3740.0 *	* 2.7 *	* 268.0 *	* 3739.4 *	* -6.9 *	* -36.7 *	* 37.4 *	
* 3750.0 *	* 2.7 *	* 267.0 *	* 3749.4 *	* -6.9 *	* -37.2 *	* 37.8 *	
* 3760.0 *	* 2.7 *	* 266.0 *	* 3759.4 *	* -7.0 *	* -37.7 *	* 38.3 *	
* 3770.0 *	* 2.6 *	* 267.0 *	* 3769.4 *	* -7.0 *	* -38.1 *	* 38.8 *	
* 3780.0 *	* 2.6 *	* 268.0 *	* 3779.4 *	* -7.0 *	* -38.6 *	* 39.2 *	
* 3790.0 *	* 2.4 *	* 269.0 *	* 3789.4 *	* -7.0 *	* -39.0 *	* 39.6 *	
* 3800.0 *	* 2.3 *	* 264.0 *	* 3799.4 *	* -7.0 *	* -39.4 *	* 40.0 *	
* 3810.0 *	* 2.4 *	* 269.0 *	* 3809.4 *	* -7.1 *	* -39.8 *	* 40.4 *	
* 3820.0 *	* 2.5 *	* 267.0 *	* 3819.4 *	* -7.1 *	* -40.2 *	* 40.9 *	
* 3830.0 *	* 2.5 *	* 266.0 *	* 3829.3 *	* -7.1 *	* -40.7 *	* 41.3 *	
* 3840.0 *	* 2.6 *	* 271.0 *	* 3839.3 *	* -7.1 *	* -41.1 *	* 41.7 *	
* 3850.0 *	* 2.8 *	* 271.0 *	* 3849.3 *	* -7.1 *	* -41.6 *	* 42.2 *	
* 3860.0 *	* 2.8 *	* 272.0 *	* 3859.3 *	* -7.1 *	* -42.1 *	* 42.7 *	
* 3870.0 *	* 2.8 *	* 266.0 *	* 3869.3 *	* -7.1 *	* -42.6 *	* 43.2 *	
* 3880.0 *	* 2.8 *	* 266.0 *	* 3879.3 *	* -7.1 *	* -43.1 *	* 43.7 *	
* 3890.0 *	* 2.8 *	* 268.0 *	* 3889.3 *	* -7.2 *	* -43.6 *	* 44.2 *	
* 3900.0 *	* 2.8 *	* 267.0 *	* 3899.3 *	* -7.2 *	* -44.1 *	* 44.6 *	
* 3910.0 *	* 2.8 *	* 266.0 *	* 3909.3 *	* -7.2 *	* -44.5 *	* 45.1 *	
* 3920.0 *	* 2.6 *	* 268.0 *	* 3919.2 *	* -7.2 *	* -45.0 *	* 45.6 *	
* 3930.0 *	* 2.5 *	* 265.0 *	* 3929.2 *	* -7.3 *	* -45.4 *	* 46.0 *	
* 3940.0 *	* 2.4 *	* 265.0 *	* 3939.2 *	* -7.3 *	* -45.9 *	* 46.4 *	
* 3950.0 *	* 2.5 *	* 266.0 *	* 3949.2 *	* -7.3 *	* -46.4 *	* 46.9 *	
* 3960.0 *	* 2.6 *	* 265.0 *	* 3959.2 *	* -7.4 *	* -46.7 *	* 47.3 *	
* 3970.0 *	* 2.5 *	* 269.0 *	* 3969.2 *	* -7.4 *	* -47.2 *	* 47.7 *	
* 3980.0 *	* 2.7 *	* 266.0 *	* 3979.2 *	* -7.4 *	* -47.6 *	* 48.2 *	
* 3990.0 *	* 2.6 *	* 267.0 *	* 3989.2 *	* -7.4 *	* -48.1 *	* 48.7 *	
* 4000.0 *	* 2.5 *	* 265.0 *	* 3999.2 *	* -7.5 *	* -48.5 *	* 49.1 *	
* 4010.0 *	* 2.6 *	* 268.0 *	* 4009.2 *	* -7.5 *	* -49.0 *	* 49.6 *	
* 4020.0 *	* 2.7 *	* 268.0 *	* 4019.1 *	* -7.5 *	* -49.5 *	* 50.0 *	
* 4030.0 *	* 2.7 *	* 267.0 *	* 4029.1 *	* -7.5 *	* -49.9 *	* 50.5 *	
* 4040.0 *	* 2.7 *	* 266.0 *	* 4039.1 *	* -7.6 *	* -50.4 *	* 51.0 *	
* 4050.0 *	* 2.6 *	* 266.0 *	* 4049.1 *	* -7.6 *	* -50.8 *	* 51.4 *	
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* DEPTH	* DEVIATION	* AZIMUTH	* VERTICAL	* CO-ORDINATES		* COURSE	
* FEET	* DEGREES	* DEGREES	* DEPTH	* + NORTH	* + EAST	* LENGTH	*
*	*	*	* FEET	* - SOUTH	* - WEST	* FEET	*
*****							
* 4060.0	* 2.7	* 264.0	* 4059.1	* -7.7	* -51.3	* 51.9	*
* 4070.0	* 2.8	* 263.0	* 4069.1	* -7.7	* -51.8	* 52.4	*
* 4080.0	* 2.8	* 267.0	* 4079.1	* -7.7	* -52.3	* 52.9	*
* 4090.0	* 2.8	* 262.0	* 4089.1	* -7.8	* -52.8	* 53.3	*
* 4100.0	* 2.8	* 267.0	* 4099.1	* -7.8	* -53.3	* 53.8	*
* 4110.0	* 2.8	* 271.0	* 4109.0	* -7.8	* -53.7	* 54.3	*
* 4120.0	* 2.8	* 261.0	* 4119.0	* -7.9	* -54.2	* 54.8	*
* 4130.0	* 2.8	* 262.0	* 4129.0	* -8.0	* -54.7	* 55.3	*
* 4140.0	* 3.0	* 261.0	* 4139.0	* -8.1	* -55.2	* 55.8	*
* 4150.0	* 2.9	* 259.0	* 4149.0	* -8.1	* -55.7	* 56.3	*
* 4160.0	* 3.0	* 260.0	* 4159.0	* -8.2	* -56.2	* 56.8	*
* 4170.0	* 3.0	* 259.0	* 4169.0	* -8.3	* -56.8	* 57.4	*
* 4180.0	* 3.0	* 260.0	* 4178.9	* -8.4	* -57.3	* 57.9	*
* 4190.0	* 3.0	* 258.0	* 4188.9	* -8.5	* -57.8	* 58.4	*
* 4200.0	* 3.0	* 256.0	* 4198.9	* -8.7	* -58.3	* 58.9	*
* 4210.0	* 3.0	* 255.5	* 4208.9	* -8.8	* -58.8	* 59.5	*
* 4220.0	* 3.0	* 255.0	* 4218.9	* -8.9	* -59.3	* 60.0	*
* 4230.0	* 3.2	* 255.0	* 4228.9	* -9.1	* -59.8	* 60.5	*
* 4240.0	* 3.1	* 253.0	* 4238.9	* -9.2	* -60.4	* 61.1	*
* 4250.0	* 3.2	* 252.0	* 4248.8	* -9.4	* -60.9	* 61.6	*
* 4260.0	* 3.1	* 253.0	* 4258.8	* -9.6	* -61.4	* 62.1	*
* 4270.0	* 3.2	* 257.0	* 4268.8	* -9.7	* -62.0	* 62.7	*
* 4280.0	* 3.3	* 252.0	* 4278.8	* -9.9	* -62.5	* 63.3	*
* 4290.0	* 3.3	* 249.0	* 4288.8	* -10.1	* -63.0	* 63.8	*
* 4300.0	* 3.3	* 249.0	* 4298.8	* -10.3	* -63.6	* 64.4	*
* 4310.0	* 3.5	* 251.0	* 4308.7	* -10.5	* -64.2	* 65.0	*
* 4320.0	* 3.5	* 251.0	* 4318.7	* -10.7	* -64.7	* 65.6	*
* 4330.0	* 3.6	* 255.0	* 4328.7	* -10.8	* -65.3	* 66.2	*
* 4340.0	* 3.7	* 255.0	* 4338.7	* -11.0	* -66.0	* 66.9	*
* 4350.0	* 3.7	* 256.0	* 4348.7	* -11.2	* -66.6	* 67.5	*
* 4360.0	* 3.8	* 255.0	* 4358.6	* -11.3	* -67.2	* 68.2	*
* 4370.0	* 3.9	* 252.0	* 4368.6	* -11.5	* -67.9	* 68.8	*
* 4380.0	* 4.0	* 251.0	* 4378.6	* -11.8	* -68.5	* 69.5	*
* 4390.0	* 3.9	* 251.0	* 4388.6	* -12.0	* -69.2	* 70.2	*
* 4400.0	* 4.0	* 251.0	* 4398.6	* -12.2	* -69.8	* 70.9	*
* 4410.0	* 3.9	* 252.0	* 4408.5	* -12.4	* -70.5	* 71.6	*
* 4420.0	* 4.1	* 255.0	* 4418.5	* -12.6	* -71.2	* 72.3	*
* 4430.0	* 4.1	* 254.0	* 4428.5	* -12.8	* -71.9	* 73.0	*
* 4440.0	* 4.3	* 255.0	* 4438.4	* -13.0	* -72.6	* 73.7	*
* 4450.0	* 4.3	* 254.0	* 4448.4	* -13.2	* -73.3	* 74.5	*
* 4460.0	* 4.3	* 253.0	* 4458.4	* -13.4	* -74.0	* 75.2	*
* 4470.0	* 4.1	* 256.0	* 4468.4	* -13.6	* -74.7	* 75.9	*
* 4480.0	* 4.2	* 254.0	* 4478.3	* -13.8	* -75.4	* 76.7	*
* 4490.0	* 4.4	* 254.0	* 4488.3	* -14.0	* -76.2	* 77.4	*
* 4500.0	* 4.4	* 253.0	* 4498.3	* -14.2	* -76.9	* 78.2	*
* 4510.0	* 4.3	* 250.0	* 4508.3	* -14.5	* -77.6	* 78.9	*
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* DEPTH	* DEVIATION	* AZIMUTH	* TRUE	* CO-ORDINATES	* COURSE
* FEET	* DEGREES	* DEGREES	* VERTICAL	* + NORTH * + EAST	* LENGTH
			* DEPTH	* - SOUTH * - WEST	* FEET
			* FEET		
* 4520.0	* 4.5	* 251.0	* 4518.2	* -14.8 * -78.3	* 79.7
* 4530.0	* 4.5	* 250.0	* 4528.2	* -15.0 * -79.1	* 80.5
* 4540.0	* 4.6	* 250.0	* 4538.2	* -15.3 * -79.8	* 81.3
* 4550.0	* 4.6	* 250.0	* 4548.1	* -15.6 * -80.6	* 82.1
* 4560.0	* 4.5	* 251.0	* 4558.1	* -15.8 * -81.3	* 82.9
* 4570.0	* 4.5	* 246.0	* 4568.1	* -16.2 * -82.0	* 83.6
* 4580.0	* 4.5	* 245.0	* 4578.0	* -16.5 * -82.8	* 84.4
* 4590.0	* 4.5	* 242.0	* 4588.0	* -16.9 * -83.4	* 85.1
* 4600.0	* 4.5	* 244.0	* 4598.0	* -17.2 * -84.1	* 85.9
* 4610.0	* 4.6	* 240.0	* 4607.9	* -17.6 * -84.8	* 86.6
* 4620.0	* 4.5	* 240.0	* 4617.9	* -18.0 * -85.5	* 87.4
* 4630.0	* 4.5	* 238.0	* 4627.9	* -18.4 * -86.2	* 88.1
* 4640.0	* 4.6	* 236.0	* 4637.8	* -18.9 * -86.9	* 88.9
* 4650.0	* 4.4	* 244.0	* 4647.8	* -19.2 * -87.5	* 89.6
* 4660.0	* 4.4	* 241.0	* 4657.8	* -19.6 * -88.2	* 90.4
* 4670.0	* 4.7	* 246.0	* 4667.8	* -19.9 * -89.0	* 91.2
* 4680.0	* 4.5	* 247.0	* 4677.7	* -20.2 * -89.7	* 91.9
* 4690.0	* 4.5	* 243.0	* 4687.7	* -20.6 * -90.4	* 92.7
* 4700.0	* 4.6	* 243.0	* 4697.7	* -20.9 * -91.1	* 93.5
* 4710.0	* 4.5	* 241.0	* 4707.6	* -21.3 * -91.8	* 94.2
* 4720.0	* 4.5	* 241.0	* 4717.6	* -21.7 * -92.5	* 95.0
* 4730.0	* 4.5	* 245.0	* 4727.6	* -22.0 * -93.2	* 95.7
* 4740.0	* 4.6	* 240.0	* 4737.5	* -22.4 * -93.9	* 96.5
* 4750.0	* 4.4	* 240.0	* 4747.5	* -22.8 * -94.5	* 97.3
* 4760.0	* 4.5	* 241.0	* 4757.5	* -23.2 * -95.2	* 98.0
* 4770.0	* 4.4	* 236.0	* 4767.4	* -23.6 * -95.9	* 98.7
* 4780.0	* 4.4	* 235.0	* 4777.4	* -24.0 * -96.5	* 99.4
* 4790.0	* 4.4	* 235.0	* 4787.4	* -24.5 * -97.1	* 100.2
* 4800.0	* 4.3	* 237.0	* 4797.4	* -24.9 * -97.7	* 100.9
* 4810.0	* 4.4	* 243.0	* 4807.3	* -25.2 * -98.4	* 101.6
* 4820.0	* 4.4	* 241.0	* 4817.3	* -25.6 * -99.1	* 102.4
* 4830.0	* 4.3	* 239.0	* 4827.3	* -26.0 * -99.7	* 103.1
* 4840.0	* 4.4	* 241.0	* 4837.2	* -26.4 * -100.4	* 103.8
* 4850.0	* 4.4	* 243.0	* 4847.2	* -26.7 * -101.1	* 104.6
* 4860.0	* 4.3	* 242.0	* 4857.2	* -27.1 * -101.8	* 105.3
* 4870.0	* 4.4	* 241.0	* 4867.2	* -27.4 * -102.4	* 106.0
* 4880.0	* 4.4	* 239.0	* 4877.1	* -27.8 * -103.1	* 106.8
* 4890.0	* 4.3	* 241.0	* 4887.1	* -28.2 * -103.7	* 107.5
* 4900.0	* 4.4	* 239.0	* 4897.1	* -28.6 * -104.4	* 108.3
* 4910.0	* 4.2	* 237.0	* 4907.0	* -29.0 * -105.0	* 108.9
* 4920.0	* 4.1	* 235.0	* 4917.0	* -29.4 * -105.6	* 109.6
* 4930.0	* 4.2	* 236.0	* 4927.0	* -29.8 * -106.2	* 110.3
* 4940.0	* 4.0	* 236.0	* 4937.0	* -30.2 * -106.8	* 111.0
* 4950.0	* 3.9	* 236.0	* 4946.9	* -30.6 * -107.4	* 111.6
* 4960.0	* 3.9	* 239.0	* 4956.9	* -30.9 * -107.9	* 112.3
* 4970.0	* 4.1	* 242.0	* 4966.9	* -31.3 * -108.6	* 113.0

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* DEPTH	* DEVIATION	* AZIMUTH	* TRUE	* CO-ORDINATES	* COURSE
* FEET	* DEGREES	* DEGREES	* VERTICAL	* NORTH	* EAST
			* DEPTH	* SOUTH	* WEST
			* FEET		* FEET
* 4980.0	* 3.8	* 244.0	* 4976.0	* -31.6	* -109.2
* 4990.0	* 4.0	* 246.0	* 4986.8	* -31.8	* -109.8
* 5000.0	* 4.1	* 246.0	* 4996.8	* -32.1	* -110.5
* 5010.0	* 4.3	* 246.0	* 5006.8	* -32.4	* -111.1
* 5020.0	* 4.3	* 248.0	* 5016.8	* -32.7	* -111.8
* 5030.0	* 4.2	* 247.0	* 5026.7	* -33.0	* -112.5
* 5040.0	* 4.3	* 247.0	* 5036.7	* -33.3	* -113.2
* 5050.0	* 4.3	* 245.0	* 5046.7	* -33.6	* -113.9
* 5060.0	* 4.3	* 245.0	* 5056.7	* -33.9	* -114.6
* 5070.0	* 4.3	* 248.0	* 5066.6	* -34.2	* -115.3
* 5080.0	* 4.1	* 246.0	* 5076.6	* -34.5	* -115.9
* 5090.0	* 4.1	* 247.0	* 5086.6	* -34.8	* -116.6
* 5100.0	* 4.1	* 243.0	* 5096.5	* -35.1	* -117.2
* 5110.0	* 3.9	* 242.0	* 5106.5	* -35.4	* -117.8
* 5120.0	* 3.9	* 243.0	* 5116.5	* -35.7	* -118.4
* 5130.0	* 4.1	* 245.0	* 5126.5	* -36.0	* -119.1
* 5140.0	* 4.1	* 244.0	* 5136.5	* -36.4	* -119.7
* 5150.0	* 4.4	* 246.0	* 5146.4	* -36.7	* -120.4
* 5160.0	* 4.4	* 247.0	* 5156.4	* -37.0	* -121.1
* 5170.0	* 4.4	* 246.0	* 5166.4	* -37.3	* -121.8
* 5180.0	* 4.4	* 246.0	* 5176.3	* -37.6	* -122.5
* 5190.0	* 4.4	* 243.0	* 5186.3	* -37.9	* -123.2
* 5200.0	* 4.4	* 243.0	* 5196.3	* -38.3	* -123.9
* 5210.0	* 4.4	* 242.0	* 5206.2	* -38.7	* -124.6
* 5220.0	* 4.4	* 243.0	* 5216.2	* -39.0	* -125.2
* 5230.0	* 4.4	* 243.0	* 5226.2	* -39.3	* -125.9
* 5240.0	* 4.5	* 246.0	* 5236.2	* -39.7	* -126.6
* 5250.0	* 4.5	* 243.0	* 5246.1	* -40.0	* -127.3
* 5260.0	* 4.5	* 245.0	* 5256.1	* -40.4	* -128.0
* 5270.0	* 4.4	* 245.0	* 5266.1	* -40.7	* -128.7
* 5280.0	* 4.6	* 243.0	* 5276.0	* -41.0	* -129.5
* 5290.0	* 4.4	* 239.0	* 5286.0	* -41.4	* -130.1
* 5300.0	* 4.2	* 240.0	* 5296.0	* -41.8	* -130.7
* 5310.0	* 4.3	* 243.0	* 5305.9	* -42.1	* -131.4
* 5320.0	* 4.4	* 242.0	* 5315.9	* -42.5	* -132.1
* 5330.0	* 4.3	* 241.0	* 5325.9	* -42.9	* -132.7
* 5340.0	* 4.3	* 240.0	* 5335.9	* -43.2	* -133.4
* 5350.0	* 4.3	* 240.0	* 5345.8	* -43.6	* -134.0
* 5360.0	* 4.4	* 241.0	* 5355.8	* -44.0	* -134.7
* 5370.0	* 4.4	* 238.0	* 5365.8	* -44.4	* -135.4
* 5380.0	* 4.3	* 236.0	* 5375.7	* -44.8	* -136.0
* 5390.0	* 4.4	* 238.0	* 5385.7	* -45.2	* -136.6
* 5400.0	* 4.6	* 238.0	* 5395.7	* -45.6	* -137.3
* 5410.0	* 4.5	* 238.0	* 5405.7	* -46.1	* -138.0
* 5420.0	* 4.6	* 237.0	* 5415.6	* -46.5	* -138.7
* 5430.0	* 4.5	* 239.0	* 5425.6	* -46.9	* -139.3

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* DEPTH	* DEVIATION	* AZIMUTH	* TRUE	* CO-ORDINATES	* COURSE	
* FEET	* DEGREES	* DEGREES	* VERTICAL	* NORTH	* LENGTH	
			* DEPTH	* + EAST	* FEET	
			* FEET	* - SOUTH		
				* - WEST		
* 5440.0	* 4.6	* 238.0	* 5435.6	* -47.3	* -140.0	* 147.8
* 5450.0	* 4.7	* 238.0	* 5445.5	* -47.8	* -140.7	* 148.6
* 5460.0	* 4.7	* 236.0	* 5455.5	* -48.2	* -141.4	* 149.4
* 5470.0	* 4.5	* 237.0	* 5465.5	* -48.6	* -142.0	* 150.1
* 5480.0	* 4.7	* 237.0	* 5475.4	* -49.1	* -142.7	* 150.9
* 5490.0	* 4.6	* 239.0	* 5485.4	* -49.5	* -143.4	* 151.7
* 5500.0	* 4.6	* 239.0	* 5495.4	* -49.9	* -144.1	* 152.5
* 5510.0	* 4.5	* 240.0	* 5505.3	* -50.3	* -144.8	* 153.3
* 5520.0	* 4.7	* 239.0	* 5515.3	* -50.7	* -145.5	* 154.1
* 5530.0	* 4.7	* 238.0	* 5525.3	* -51.2	* -146.2	* 154.9
* 5540.0	* 4.7	* 238.0	* 5535.2	* -51.6	* -146.9	* 155.7
* 5550.0	* 4.9	* 239.0	* 5545.2	* -52.0	* -147.6	* 156.5
* 5560.0	* 5.1	* 238.0	* 5555.2	* -52.5	* -148.4	* 157.4
* 5570.0	* 5.1	* 237.0	* 5565.1	* -53.0	* -149.1	* 158.2
* 5580.0	* 5.0	* 238.0	* 5575.1	* -53.5	* -149.8	* 159.1
* 5590.0	* 5.2	* 237.0	* 5585.0	* -54.0	* -150.6	* 160.0
* 5600.0	* 5.1	* 239.0	* 5595.0	* -54.4	* -151.4	* 160.9
* 5610.0	* 4.9	* 237.0	* 5605.0	* -54.9	* -152.1	* 161.7
* 5620.0	* 4.7	* 237.0	* 5614.9	* -55.3	* -152.8	* 162.5
* 5630.0	* 5.0	* 236.0	* 5624.9	* -55.8	* -153.5	* 163.3
* 5640.0	* 5.2	* 237.0	* 5634.8	* -56.3	* -154.3	* 164.2
* 5650.0	* 5.2	* 235.0	* 5644.8	* -56.8	* -155.0	* 165.1
* 5660.0	* 5.1	* 235.0	* 5654.8	* -57.3	* -155.7	* 165.9
* 5670.0	* 5.1	* 236.0	* 5664.7	* -57.8	* -156.5	* 166.8
* 5680.0	* 5.1	* 236.0	* 5674.7	* -58.3	* -157.2	* 167.7
* 5690.0	* 5.1	* 235.0	* 5684.6	* -58.8	* -157.9	* 168.5
* 5700.0	* 4.9	* 236.0	* 5694.6	* -59.3	* -158.6	* 169.4
* 5710.0	* 4.7	* 235.0	* 5704.6	* -59.8	* -159.3	* 170.2
* 5720.0	* 4.8	* 232.0	* 5714.5	* -60.3	* -160.0	* 171.0
* 5730.0	* 4.8	* 234.0	* 5724.5	* -60.8	* -160.6	* 171.8
* 5740.0	* 4.8	* 237.0	* 5734.5	* -61.2	* -161.3	* 172.6
* 5750.0	* 4.9	* 235.0	* 5744.4	* -61.7	* -162.0	* 173.4
* 5760.0	* 5.0	* 232.0	* 5754.4	* -62.3	* -162.7	* 174.2
* 5770.0	* 4.8	* 238.0	* 5764.4	* -62.7	* -163.4	* 175.1
* 5780.0	* 4.7	* 236.0	* 5774.3	* -63.2	* -164.1	* 175.9
* 5790.0	* 4.8	* 237.0	* 5784.3	* -63.6	* -164.8	* 176.7
* 5800.0	* 4.8	* 238.0	* 5794.3	* -64.1	* -165.5	* 177.5
* 5810.0	* 5.0	* 238.0	* 5804.2	* -64.5	* -166.3	* 178.4
* 5820.0	* 5.0	* 235.0	* 5814.2	* -65.0	* -167.0	* 179.2
* 5830.0	* 5.0	* 237.0	* 5824.1	* -65.5	* -167.7	* 180.1
* 5840.0	* 5.0	* 237.0	* 5834.1	* -66.0	* -168.4	* 180.9
* 5850.0	* 4.8	* 238.0	* 5844.1	* -66.4	* -169.2	* 181.7
* 5860.0	* 4.8	* 241.0	* 5854.0	* -66.8	* -169.9	* 182.6
* 5870.0	* 4.6	* 246.0	* 5864.0	* -67.2	* -170.6	* 183.4
* 5880.0	* 4.7	* 246.0	* 5874.0	* -67.5	* -171.4	* 184.2
* 5890.0	* 5.1	* 246.0	* 5883.9	* -67.9	* -172.2	* 185.1

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* DEPTH	* DEVIATION	* AZIMUTH	* TRUE	* VERTICAL	* CO-ORDINATES	* COURSE
* FEET	* DEGREES	* DEGREES	* DEPTH	* FEET	* + NORTH * + EAST	* LENGTH
					* - SOUTH * - WEST	* FEET
* 5900.0	* 4.9	* 249.0	* 5893.9	* -68.2	* -173.0	* 185.9
* 5910.0	* 4.9	* 252.0	* 5903.9	* -68.4	* -173.8	* 186.8
* 5920.0	* 4.9	* 250.0	* 5913.8	* -68.7	* -174.6	* 187.6
* 5930.0	* 4.8	* 252.0	* 5923.8	* -69.0	* -175.4	* 188.5
* 5940.0	* 4.8	* 254.0	* 5933.8	* -69.2	* -176.2	* 189.3
* 5950.0	* 4.7	* 258.0	* 5943.7	* -69.4	* -177.0	* 190.1
* 5960.0	* 5.1	* 255.0	* 5953.7	* -69.6	* -177.9	* 191.0
* 5970.0	* 5.2	* 254.0	* 5963.6	* -69.9	* -178.7	* 191.9
* 5980.0	* 5.2	* 254.0	* 5973.6	* -70.1	* -179.6	* 192.8
* 5990.0	* 5.3	* 255.0	* 5983.6	* -70.3	* -180.5	* 193.7
* 6000.0	* 5.5	* 254.0	* 5993.5	* -70.6	* -181.4	* 194.7
* 6010.0	* 5.7	* 255.0	* 6003.5	* -70.9	* -182.4	* 195.7
* 6020.0	* 5.7	* 253.0	* 6013.4	* -71.2	* -183.3	* 196.6
* 6030.0	* 5.7	* 256.0	* 6023.4	* -71.4	* -184.3	* 197.6
* 6040.0	* 5.8	* 255.0	* 6033.3	* -71.7	* -185.3	* 198.6
* 6050.0	* 5.7	* 255.0	* 6043.3	* -71.9	* -186.2	* 199.6
* 6060.0	* 5.7	* 252.0	* 6053.2	* -72.2	* -187.2	* 200.6
* 6070.0	* 5.7	* 254.0	* 6063.2	* -72.5	* -188.1	* 201.6
* 6080.0	* 5.6	* 261.0	* 6073.1	* -72.7	* -189.1	* 202.6
* 6090.0	* 5.6	* 258.0	* 6083.1	* -72.9	* -190.0	* 203.5
* 6100.0	* 5.9	* 258.0	* 6093.0	* -73.1	* -191.0	* 204.5
* 6110.0	* 5.9	* 261.0	* 6103.0	* -73.2	* -192.1	* 205.5
* 6120.0	* 6.0	* 262.0	* 6112.9	* -73.4	* -193.1	* 206.6
* 6130.0	* 6.1	* 262.0	* 6122.8	* -73.5	* -194.1	* 207.6
* 6140.0	* 6.0	* 262.0	* 6132.8	* -73.7	* -195.2	* 208.6
* 6150.0	* 6.3	* 261.0	* 6142.7	* -73.8	* -196.3	* 209.7
* 6160.0	* 6.5	* 260.0	* 6152.7	* -74.0	* -197.4	* 210.8
* 6170.0	* 6.4	* 261.0	* 6162.6	* -74.2	* -198.5	* 211.9
* 6180.0	* 6.7	* 260.0	* 6172.5	* -74.4	* -199.6	* 213.0
* 6190.0	* 6.6	* 262.0	* 6182.5	* -74.6	* -200.8	* 214.2
* 6200.0	* 6.5	* 263.0	* 6192.4	* -74.7	* -201.9	* 215.3
* 6210.0	* 6.5	* 264.1	* 6202.3	* -74.8	* -203.0	* 216.4
* 6220.0	* 6.5	* 267.0	* 6212.3	* -74.9	* -204.1	* 217.4
* 6230.0	* 6.6	* 266.0	* 6222.2	* -75.0	* -205.3	* 218.6
* 6240.0	* 6.6	* 267.0	* 6232.1	* -75.0	* -206.4	* 219.7
* 6250.0	* 6.8	* 267.0	* 6242.1	* -75.1	* -207.6	* 220.8
* 6260.0	* 6.8	* 267.0	* 6252.0	* -75.1	* -208.8	* 221.9
* 6270.0	* 6.8	* 269.0	* 6261.9	* -75.2	* -210.0	* 223.0
* 6280.0	* 6.8	* 269.0	* 6271.9	* -75.2	* -211.2	* 224.2
* 6290.0	* 7.0	* 272.0	* 6281.8	* -75.1	* -212.4	* 225.3
* 6300.0	* 6.9	* 272.0	* 6291.7	* -75.1	* -213.6	* 226.4
* 6310.0	* 7.1	* 272.0	* 6301.6	* -75.1	* -214.8	* 227.6
* 6320.0	* 7.0	* 272.0	* 6311.6	* -75.0	* -216.0	* 228.7
* 6330.0	* 6.9	* 271.0	* 6321.5	* -75.0	* -217.2	* 229.8
* 6340.0	* 6.8	* 270.0	* 6331.4	* -75.0	* -218.4	* 230.9
* 6350.0	* 6.9	* 270.0	* 6341.3	* -75.0	* -219.6	* 232.1

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* DEPTH	* DEVIATION	* AZIMUTH	* VERTICAL	* CO-ORDINATES		* COURSE
* FEET	* DEGREES	* DEGREES	* DEPTH	* + NORTH	* + EAST	* LENGTH
* *	* *	* *	* FEET	* - SOUTH	* - WEST	* FEET
* 6360.0	* 6.6	* 273.0	* 6351.3	* -74.9	* -220.8	* 233.2
* 6370.0	* 5.9	* 273.0	* 6361.2	* -74.9	* -221.8	* 234.1
* 6380.0	* 5.9	* 270.0	* 6371.2	* -74.9	* -222.8	* 235.1
* 6390.0	* 6.1	* 271.0	* 6381.1	* -74.9	* -223.9	* 236.1
* 6400.0	* 6.5	* 273.0	* 6391.1	* -74.8	* -225.0	* 237.1
* 6410.0	* 6.4	* 275.0	* 6401.0	* -74.7	* -226.1	* 238.2
* 6420.0	* 5.4	* 275.0	* 6410.9	* -74.6	* -227.3	* 239.2
* 6430.0	* 7.9	* 272.0	* 6420.8	* -74.6	* -228.6	* 240.5
* 6440.0	* 7.5	* 272.0	* 6430.8	* -74.5	* -229.9	* 241.7
* 6450.0	* 6.9	* 272.0	* 6440.7	* -74.5	* -231.1	* 242.8
* 6460.0	* 6.7	* 271.0	* 6450.6	* -74.4	* -232.3	* 243.9
* 6470.0	* 6.5	* 270.0	* 6460.5	* -74.4	* -233.4	* 245.0
* 6480.0	* 6.5	* 271.0	* 6470.5	* -74.4	* -234.6	* 246.1
* 6490.0	* 6.5	* 270.0	* 6480.4	* -74.4	* -235.7	* 247.2
* 6500.0	* 6.4	* 269.0	* 6490.4	* -74.4	* -236.8	* 248.2
* 6510.0	* 6.4	* 270.0	* 6500.3	* -74.4	* -237.9	* 249.3
* 6520.0	* 6.2	* 270.0	* 6510.2	* -74.4	* -239.0	* 250.3
* 6530.0	* 6.1	* 271.0	* 6520.2	* -74.4	* -240.1	* 251.3
* 6540.0	* 6.2	* 268.0	* 6530.1	* -74.5	* -241.1	* 252.4
* 6550.0	* 6.1	* 269.0	* 6540.1	* -74.5	* -242.2	* 253.4
* 6560.0	* 6.1	* 269.0	* 6550.0	* -74.5	* -243.3	* 254.4
* 6570.0	* 6.0	* 268.0	* 6560.0	* -74.5	* -244.3	* 255.4
* 6580.0	* 5.8	* 271.0	* 6569.9	* -74.5	* -245.3	* 256.4
* 6590.0	* 5.9	* 267.0	* 6579.8	* -74.6	* -246.3	* 257.4
* 6600.0	* 5.8	* 267.0	* 6589.8	* -74.6	* -247.4	* 258.4
* 6610.0	* 5.8	* 266.0	* 6599.7	* -74.7	* -248.4	* 259.4
* 6620.0	* 5.4	* 265.0	* 6609.7	* -74.8	* -249.3	* 260.3
* 6630.0	* 5.3	* 264.0	* 6619.7	* -74.9	* -250.2	* 261.2
* 6640.0	* 5.2	* 264.0	* 6629.6	* -75.0	* -251.1	* 262.1
* 6650.0	* 5.2	* 264.0	* 6639.6	* -75.1	* -252.0	* 263.0
* 6660.0	* 5.2	* 264.0	* 6649.5	* -75.2	* -252.9	* 263.9
* 6670.0	* 5.1	* 262.0	* 6659.5	* -75.3	* -253.8	* 264.7
* 6680.0	* 5.0	* 262.0	* 6669.5	* -75.4	* -254.7	* 265.6
* 6690.0	* 5.1	* 262.0	* 6679.4	* -75.5	* -255.6	* 266.5
* 6700.0	* 4.8	* 263.0	* 6689.4	* -75.6	* -256.4	* 267.3
* 6710.0	* 5.1	* 261.0	* 6699.3	* -75.8	* -257.3	* 268.2
* 6720.0	* 5.0	* 261.0	* 6709.3	* -75.9	* -258.1	* 269.1
* 6730.0	* 4.8	* 260.0	* 6719.3	* -76.1	* -258.9	* 269.9
* 6740.0	* 4.5	* 258.0	* 6729.2	* -76.2	* -259.7	* 270.7
* 6750.0	* 4.8	* 258.0	* 6739.2	* -76.4	* -260.5	* 271.5
* 6760.0	* 4.5	* 258.0	* 6749.2	* -76.6	* -261.3	* 272.3
* 6770.0	* 4.4	* 256.0	* 6759.1	* -76.7	* -262.0	* 273.0
* 6780.0	* 4.5	* 258.0	* 6769.1	* -76.9	* -262.8	* 273.8
* 6790.0	* 4.4	* 256.0	* 6779.1	* -77.1	* -263.6	* 274.6
* 6800.0	* 4.2	* 256.0	* 6789.1	* -77.3	* -264.3	* 275.3
* 6810.0	* 4.1	* 255.0	* 6799.0	* -77.5	* -265.0	* 276.0

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* DEPTH	* DEVIATION	* AZIMUTH	* TRUE	* CO-ORDINATES	* COURSE
* FEET	* DEGREES	* DEGREES	* VERTICAL	* + NORTH	* + EAST
			* DEPTH	* - SOUTH	* - WEST
			* FEET		* FEET
* 6820.0	* 4.0	* 254.0	* 6809.0	* -77.6	* -265.6
* 6830.0	* 3.9	* 251.0	* 6819.0	* -77.9	* -266.3
* 6840.0	* 4.1	* 253.0	* 6829.0	* -78.1	* -267.0
* 6850.0	* 4.0	* 253.0	* 6838.9	* -78.3	* -267.6
* 6860.0	* 4.0	* 250.0	* 6848.9	* -78.5	* -268.3
* 6870.0	* 4.0	* 249.0	* 6858.9	* -78.8	* -268.9
* 6880.0	* 3.7	* 250.0	* 6868.9	* -79.0	* -269.5
* 6890.0	* 3.6	* 248.0	* 6878.8	* -79.2	* -270.1
* 6900.0	* 3.6	* 247.0	* 6888.8	* -79.5	* -270.7
* 6910.0	* 3.4	* 245.0	* 6898.8	* -79.7	* -271.2
* 6920.0	* 3.0	* 246.0	* 6908.8	* -79.9	* -271.7
* 6930.0	* 3.1	* 242.0	* 6918.8	* -80.2	* -272.2
* 6940.0	* 2.9	* 242.0	* 6928.8	* -80.4	* -272.6
* 6950.0	* 2.7	* 241.0	* 6938.8	* -80.7	* -273.0
* 6960.0	* 2.6	* 240.0	* 6948.7	* -80.9	* -273.4
* 6970.0	* 2.4	* 239.0	* 6958.7	* -81.1	* -273.8
* 6980.0	* 2.5	* 237.0	* 6968.7	* -81.3	* -274.2
* 6990.0	* 2.5	* 239.0	* 6978.7	* -81.6	* -274.5
* 7000.0	* 2.4	* 233.0	* 6988.7	* -81.8	* -274.9
* 7010.0	* 2.1	* 232.0	* 6998.7	* -82.0	* -275.2
* 7020.0	* 2.1	* 232.0	* 7008.7	* -82.3	* -275.4
* 7030.0	* 2.1	* 232.0	* 7018.7	* -82.5	* -275.7
* 7040.0	* 2.1	* 231.0	* 7028.7	* -82.7	* -276.0
* 7050.0	* 2.0	* 229.0	* 7038.7	* -82.9	* -276.3
* 7060.0	* 2.0	* 232.0	* 7048.7	* -83.2	* -276.6
* 7070.0	* 2.2	* 228.0	* 7058.7	* -83.4	* -276.8
* 7080.0	* 2.0	* 228.0	* 7068.7	* -83.7	* -277.1
* 7090.0	* 1.9	* 225.0	* 7078.6	* -83.9	* -277.3
* 7100.0	* 1.8	* 223.0	* 7088.6	* -84.1	* -277.6
* 7110.0	* 2.0	* 224.0	* 7098.6	* -84.4	* -277.8
* 7120.0	* 1.8	* 223.0	* 7108.6	* -84.6	* -278.0
* 7130.0	* 1.8	* 220.0	* 7118.6	* -84.8	* -278.2
* 7140.0	* 1.7	* 219.0	* 7128.6	* -85.1	* -278.4
* 7150.0	* 1.7	* 219.0	* 7138.6	* -85.3	* -278.6
* 7160.0	* 1.7	* 218.0	* 7148.6	* -85.5	* -278.8
* 7170.0	* 1.5	* 216.0	* 7158.6	* -85.7	* -278.9
* 7180.0	* 1.5	* 211.0	* 7168.6	* -86.0	* -279.1
* 7190.0	* 1.4	* 209.0	* 7178.6	* -86.2	* -279.2
* 7200.0	* 1.4	* 206.0	* 7188.6	* -86.4	* -279.3
* 7210.0	* 1.4	* 205.0	* 7198.6	* -86.6	* -279.4
* 7220.0	* 1.2	* 210.0	* 7208.6	* -86.6	* -279.5
* 7230.0	* 1.2	* 207.0	* 7218.6	* -87.0	* -279.6
* 7240.0	* 1.1	* 203.0	* 7228.6	* -87.2	* -279.7
* 7250.0	* 1.1	* 204.0	* 7238.6	* -87.3	* -279.7
* 7260.0	* 1.1	* 201.0	* 7248.6	* -87.5	* -279.8
* 7270.0	* 1.0	* 198.0	* 7258.6	* -87.7	* -279.9

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* DEPTH	* DEVIATION	* AZIMUTH	* TRUE	* VERTICAL	* CO-ORDINATES	* COURSE
* FEET	* DEGREES	* DEGREES	* DEPTH	* FEET	* + NORTH	* + EAST
					* - SOUTH	* - WEST
						* LENGTH
						* FEET
* 7280.0	* 1.1	* 195.0	* 7268.6	* -87.9	* -279.9	* 293.4
* 7290.0	* 1.0	* 197.0	* 7278.6	* -88.0	* -280.0	* 293.5
* 7300.0	* 1.0	* 199.0	* 7288.6	* -88.2	* -280.0	* 293.6
* 7310.0	* 0.9	* 196.0	* 7298.6	* -88.4	* -280.1	* 293.7
* 7320.0	* 0.9	* 197.0	* 7308.6	* -88.5	* -280.1	* 293.8
* 7330.0	* 1.1	* 197.0	* 7318.6	* -88.7	* -280.2	* 293.9
* 7340.0	* 1.2	* 193.0	* 7328.6	* -88.9	* -280.2	* 294.0
* 7350.0	* 1.2	* 188.0	* 7338.6	* -89.1	* -280.2	* 294.1
* 7360.0	* 1.2	* 182.0	* 7348.6	* -89.3	* -280.2	* 294.1
* 7370.0	* 1.0	* 185.0	* 7358.6	* -89.5	* -280.3	* 294.2
* 7380.0	* 0.8	* 183.0	* 7368.6	* -89.6	* -280.3	* 294.3
* 7390.0	* 0.8	* 188.0	* 7378.6	* -89.8	* -280.3	* 294.3
* 7400.0	* 0.8	* 194.0	* 7388.6	* -89.9	* -280.3	* 294.4
* 7410.0	* 1.0	* 192.0	* 7398.6	* -90.1	* -280.4	* 294.5
* 7420.0	* 1.1	* 190.0	* 7408.6	* -90.3	* -280.4	* 294.6
* 7430.0	* 1.1	* 188.0	* 7418.6	* -90.4	* -280.4	* 294.6
* 7440.0	* 1.2	* 185.0	* 7428.6	* -90.7	* -280.4	* 294.7
* 7450.0	* 1.2	* 183.0	* 7438.6	* -90.9	* -280.4	* 294.8
* 7460.0	* 1.2	* 184.0	* 7448.6	* -91.1	* -280.5	* 294.9
* 7470.0	* 1.2	* 182.0	* 7458.6	* -91.3	* -280.5	* 295.0
* 7480.0	* 1.2	* 175.0	* 7468.6	* -91.5	* -280.5	* 295.0
* 7490.0	* 1.3	* 173.0	* 7478.5	* -91.7	* -280.4	* 295.0
* 7500.0	* 1.3	* 166.0	* 7488.5	* -91.9	* -280.4	* 295.1
* 7510.0	* 1.3	* 164.0	* 7498.5	* -92.2	* -280.3	* 295.1
* 7520.0	* 1.3	* 156.0	* 7508.5	* -92.4	* -280.2	* 295.0
* 7530.0	* 1.2	* 155.0	* 7518.5	* -92.6	* -280.1	* 295.0
* 7540.0	* 1.2	* 158.0	* 7528.5	* -92.7	* -280.0	* 295.0
* 7550.0	* 1.1	* 149.0	* 7538.5	* -92.9	* -279.9	* 295.0
* 7560.0	* 1.2	* 155.0	* 7548.5	* -93.1	* -279.9	* 294.9
* 7570.0	* 1.2	* 150.0	* 7558.5	* -93.3	* -279.8	* 294.9
* 7580.0	* 1.3	* 149.0	* 7568.5	* -93.5	* -279.6	* 294.8
* 7590.0	* 1.4	* 147.0	* 7578.5	* -93.7	* -279.5	* 294.8
* 7600.0	* 1.8	* 144.0	* 7588.5	* -93.9	* -279.3	* 294.7
* 7610.0	* 1.9	* 143.0	* 7598.5	* -94.2	* -279.1	* 294.6
* 7620.0	* 2.0	* 135.0	* 7608.5	* -94.4	* -278.9	* 294.4
* 7630.0	* 2.1	* 133.0	* 7618.5	* -94.7	* -278.6	* 294.3
* 7640.0	* 2.1	* 133.0	* 7628.5	* -94.9	* -278.3	* 294.1
* 7650.0	* 2.0	* 133.0	* 7638.5	* -95.2	* -278.1	* 293.9
* 7660.0	* 2.0	* 136.0	* 7648.5	* -95.4	* -277.8	* 293.8
* 7670.0	* 2.1	* 134.0	* 7658.5	* -95.7	* -277.6	* 293.6
* 7680.0	* 2.4	* 133.0	* 7668.5	* -96.0	* -277.3	* 293.4
* 7690.0	* 2.8	* 134.0	* 7678.5	* -96.3	* -276.9	* 293.2
* 7700.0	* 2.8	* 137.0	* 7688.4	* -96.7	* -276.6	* 293.0
* 7710.0	* 2.9	* 137.0	* 7698.4	* -97.0	* -276.2	* 292.8
* 7720.0	* 2.9	* 133.0	* 7708.4	* -97.4	* -275.9	* 292.6
* 7730.0	* 2.9	* 133.0	* 7718.4	* -97.7	* -275.5	* 292.3

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* DEPTH	* DEVIATION	* AZIMUTH	* TRUE	* CO-ORDINATES	* COURSE
* FEET	* DEGREES	* DEGREES	* DEPTH	* + NORTH * + EAST * - SOUTH * - WEST	* LENGTH
* FEET			* FEET		* FEET
* 7740.0	* 2.8	* 131.0	* 7726.4	* -98.1 * -275.1	* 292.1
* 7750.0	* 2.9	* 133.0	* 7738.4	* -98.4 * -274.6	* 291.9
* 7760.0	* 3.0	* 134.0	* 7748.4	* -98.8 * -274.4	* 291.6
* 7770.0	* 3.3	* 135.0	* 7758.3	* -99.2 * -274.0	* 291.4
* 7780.0	* 3.4	* 136.0	* 7768.3	* -99.6 * -273.6	* 291.1
* 7790.0	* 3.5	* 136.0	* 7778.3	* -100.0 * -273.1	* 290.9
* 7800.0	* 3.7	* 139.0	* 7788.3	* -100.5 * -272.7	* 290.7
* 7810.0	* 3.6	* 137.0	* 7798.3	* -101.0 * -272.3	* 290.4
* 7820.0	* 3.6	* 138.0	* 7808.3	* -101.4 * -271.9	* 290.2
* 7830.0	* 3.4	* 136.0	* 7818.2	* -101.9 * -271.5	* 289.9
* 7840.0	* 3.3	* 133.0	* 7828.2	* -102.3 * -271.0	* 289.7
* 7850.0	* 3.1	* 138.0	* 7838.2	* -102.7 * -270.7	* 289.5
* 7860.0	* 3.0	* 134.0	* 7848.2	* -103.0 * -270.3	* 289.3
* 7870.0	* 3.0	* 134.0	* 7858.2	* -103.4 * -269.9	* 289.0
* 7880.0	* 3.1	* 136.0	* 7868.2	* -103.8 * -269.5	* 288.8
* 7890.0	* 3.2	* 134.0	* 7878.1	* -104.2 * -269.1	* 288.6
* 7900.0	* 3.3	* 135.0	* 7888.1	* -104.6 * -268.7	* 288.4
* 7910.0	* 3.2	* 132.0	* 7898.1	* -105.0 * -268.3	* 288.1
* 7920.0	* 3.2	* 136.0	* 7908.1	* -105.4 * -267.9	* 287.9
* 7930.0	* 3.4	* 133.0	* 7918.1	* -105.8 * -267.5	* 287.7
* 7940.0	* 3.5	* 129.0	* 7928.1	* -106.1 * -267.0	* 287.4
* 7950.0	* 3.5	* 137.0	* 7938.0	* -106.6 * -266.6	* 287.1
* 7960.0	* 3.6	* 136.0	* 7948.0	* -107.0 * -266.2	* 286.9
* 7970.0	* 3.6	* 131.0	* 7958.0	* -107.5 * -265.7	* 286.6
* 7980.0	* 3.6	* 133.0	* 7968.0	* -107.9 * -265.2	* 286.3
* 7990.0	* 3.4	* 129.0	* 7978.0	* -108.3 * -264.8	* 286.1
* 8000.0	* 3.6	* 128.0	* 7987.9	* -108.6 * -264.3	* 285.7
* 8010.0	* 3.2	* 129.0	* 7997.9	* -109.0 * -263.9	* 285.5
* 8020.0	* 2.9	* 134.0	* 8007.9	* -109.3 * -263.5	* 285.3
* 8030.0	* 2.8	* 134.0	* 8017.9	* -109.7 * -263.1	* 285.1
* 8040.0	* 2.8	* 135.0	* 8027.9	* -110.0 * -262.8	* 284.9
* 8050.0	* 2.7	* 132.0	* 8037.9	* -110.3 * -262.4	* 284.7
* 8060.0	* 2.7	* 134.0	* 8047.9	* -110.7 * -262.1	* 284.5
* 8070.0	* 2.7	* 132.0	* 8057.9	* -111.0 * -261.8	* 284.3
* 8080.0	* 2.7	* 128.0	* 8067.9	* -111.3 * -261.4	* 284.1
* 8090.0	* 2.5	* 133.0	* 8077.8	* -111.6 * -261.1	* 283.9
* 8100.0	* 2.6	* 134.0	* 8087.8	* -111.9 * -260.7	* 283.7
* 8110.0	* 2.8	* 134.0	* 8097.8	* -112.2 * -260.4	* 283.5
* 8120.0	* 2.8	* 132.0	* 8107.8	* -112.6 * -260.0	* 283.3
* 8130.0	* 2.8	* 132.0	* 8117.8	* -112.9 * -259.7	* 283.1
* 8140.0	* 2.8	* 131.0	* 8127.8	* -113.2 * -259.3	* 282.9
* 8150.0	* 2.7	* 130.0	* 8137.8	* -113.5 * -258.9	* 282.7
* 8160.0	* 2.7	* 131.0	* 8147.8	* -113.8 * -258.6	* 282.5
* 8168.0	* 2.7	* 127.0	* 8155.8	* -114.0 * -258.3	* 282.3

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\* BOTTOM HOLE LOCATION \*  
\* \* \* \* \*  
\* COURSE LENGTH: 282.3 FEET \*  
\* \* \* \* \*  
\* COURSE AZIMUTH: 246.2 DEGREES \*  
\* \* \* \* \*  
\* MEASURED DEPTH: 8168.0 FEET \*  
\* \* \* \* \*  
\* TRUE VERTICAL DEPTH: 8155.8 FEET \*  
\* \* \* \* \*  
\* DISTANCE SOUTH: 114.0 FEET \*  
\* \* \* \* \*  
\* DISTANCE WEST: 258.3 FEET \*  
\* \* \* \* \*  
\* TANGENTIAL METHOD \*  
\* \* \* \* \*  
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\*-----\*  
\*-----SCHLUMBERGER-----\*  
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DIPMETER

CLUSTER

CALCULATION

LISTING

ANSCHUTZ CORPORATION

ANSCHUTZ 34-1

WILDCAT

SUMMIT, UTAH

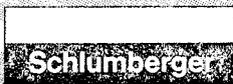
RUN NO. ONE            JOB NO. 4450

CORRELATION LENGTH        4 FT.

STEP LENGTH                2 FT.

SEARCH ANGLE              30 DEG. X2

22-JUL-78





*****									
* * * * * FORMATION * * * * * BOREHOLE * * * * * QUAL. * * * * *									
* * * * * ----- * * * * * INDEX * * * * *									
* DEPTH	* DIP	DIP	* DEV.	DEV.	DIAM	DIAM	* BEST	* * * * *	
* * * * *	* * * * *	AZI.	* * * * *	AZI.	1-3	2-4	* =4	* * * * *	
*****									
* 2312.0	25.3	71	0.6	253	7.5	7.9	4	*	*
* 2314.0	23.1	99	0.7	252	7.4	7.7	2	*	*
* 2316.0	25.4	74	0.7	252	7.3	7.5	2	*	*
* 2318.0	27.0	76	0.6	253	7.5	7.6	4	*	*
* 2320.0	31.6	72	0.6	253	7.6	7.6	2	*	*
* 2322.0	27.3	76	0.6	253	7.6	7.7	2	*	*
* 2324.0			0.6	253	7.6	7.5		*	*
* 2326.0			0.6	254	7.6	7.5		*	*
* 2328.0			0.6	256	7.7	7.6		*	*
* 2330.0	42.3	68	0.5	259	7.8	7.8	1	*	*
* 2332.0	40.9	64	0.4	261	7.8	7.8	3	*	*
* 2334.0	42.3	59	0.4	264	7.7	7.7	3	*	*
* 2336.0			0.5	261	7.7	7.7		*	*
* 2338.0			0.5	259	7.8	7.7		*	*
* 2340.0			0.5	277	8.1	7.9		*	*
* 2342.0	37.8	80	0.5	305	8.2	8.0	1	*	*
* 2344.0	25.4	87	0.6	287	7.9	7.8	4	*	*
* 2346.0	26.4	81	0.6	259	7.7	7.7	2	*	*
* 2348.0	28.1	120	0.6	259	7.7	7.7	1	*	*
* 2350.0			0.6	259	7.7	7.8		*	*
* 2352.0	28.4	77	0.6	258	7.8	7.8	4	*	*
* 2354.0	26.6	75	0.6	259	8.0	8.0	2	*	*
* 2356.0	28.1	71	0.6	261	8.3	8.1	2	*	*
* 2358.0	26.6	83	0.7	263	8.7	8.6	4	*	*
* 2360.0	23.5	83	0.8	262	9.4	9.3	4	*	*
* 2362.0	24.0	83	0.8	263	10.1	9.9	4	*	*
* 2364.0	22.8	74	0.7	264	10.0	9.8	4	*	*
* 2366.0	26.3	70	0.7	265	9.3	9.2	4	*	*
* 2368.0	34.3	69	0.7	265	9.0	8.8	4	*	*
* 2370.0	30.4	77	0.8	265	9.2	9.0	4	*	*
* 2372.0	29.1	70	0.8	263	9.4	9.2	4	*	*
* 2374.0	26.4	74	0.9	261	9.7	9.5	4	*	*
* 2376.0	25.2	70	0.9	259	10.5	9.9	2	*	*
* 2378.0	34.8	74	0.9	259	11.0	10.1	2	*	*
* 2380.0	31.4	77	1.0	259	10.4	9.6	4	*	*
* 2382.0	27.4	79	1.0	259	9.5	8.8	4	*	*
* 2384.0			1.0	259	9.1	8.6		*	*
* 2386.0	25.0	79	1.0	258	9.1	8.5	3	*	*
* 2388.0	25.8	88	1.0	258	9.0	8.4	1	*	*
* 2390.0	26.2	89	1.0	259	8.7	8.3	3	*	*
* 2392.0			1.0	260	8.4	8.2		*	*
* 2394.0			1.0	260	8.2	8.1		*	*
* 2396.0			1.0	260	8.2	8.1		*	*
* 2398.0	21.2	93	1.0	259	8.2	8.0	1	*	*
* 2400.0	22.7	81	1.0	258	8.3	8.0	3	*	*
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* DEPTH *	* DIP *	* DIP AZI. *	* DEV. *	* DEV. AZI. *	* DIAM 1-3 *	* DIAM 2-4 *	* QUAL. # *	* INDEX # *
* 2402.0	23.4	82	1.0	257	8.1	8.0	3	*
* 2404.0	26.3	268	1.0	256	7.9	8.0	1	*
* 2406.0	26.8	267	1.0	255	7.9	8.0	1	*
* 2408.0			1.0	255	8.0	8.0		*
* 2410.0			1.0	256	7.9	8.0		*
* 2412.0			1.0	256	7.9	8.0		*
* 2414.0			1.0	256	7.8	8.1		*
* 2416.0			1.0	255	7.8	8.1		*
* 2418.0	39.6	52	1.0	254	7.8	8.1	1	*
* 2420.0	41.8	52	1.0	254	7.8	8.0	1	*
* 2422.0			1.0	253	7.8	8.0		*
* 2424.0	34.6	85	1.0	253	7.9	8.1	1	*
* 2426.0	29.4	98	0.9	252	8.2	8.2	3	*
* 2428.0	30.2	97	0.8	250	8.1	8.2	3	*
* 2430.0	32.8	95	0.8	250	7.9	8.0	1	*
* 2432.0	19.1	58	0.8	252	8.1	8.1	1	*
* 2434.0	28.8	82	0.9	252	8.5	8.4	1	*
* 2436.0			0.9	250	8.6	8.5		*
* 2438.0			0.9	248	8.3	8.2		*
* 2440.0	32.3	107	0.9	247	8.1	8.0	1	*
* 2442.0	30.7	106	0.8	251	8.1	8.1	1	*
* 2444.0	31.0	81	0.8	254	8.5	8.5	1	*
* 2446.0			0.9	255	8.8	8.6		*
* 2448.0	22.9	74	0.9	253	9.2	9.0	1	*
* 2450.0	30.8	80	0.9	250	9.7	9.5	1	*
* 2452.0	28.0	79	0.9	247	10.1	9.7	1	*
* 2454.0	28.0	85	0.9	247	10.1	9.2	1	*
* 2456.0	35.0	94	0.9	246	10.2	9.4	1	*
* 2458.0	60.2	62	1.0	241	10.7	10.4	3	*
* 2460.0	36.8	70	1.0	242	11.2	10.6	1	*
* 2462.0	37.9	76	1.0	243	11.4	10.8	1	*
* 2464.0			1.0	244	11.5	10.9		*
* 2466.0			1.0	244	11.5	10.9		*
* 2468.0			0.9	244	11.1	10.7		*
* 2470.0			0.9	245	10.8	10.4		*
* 2472.0			1.0	244	11.0	10.6		*
* 2474.0			1.0	244	11.2	10.8		*
* 2476.0			1.0	242	11.5	11.0		*
* 2478.0			1.0	239	11.5	11.1		*
* 2480.0			1.0	237	11.4	11.1		*
* 2482.0			1.0	236	11.6	11.2		*
* 2484.0	39.5	86	1.0	236	11.8	11.3	2	*
* 2486.0	39.6	84	1.0	235	11.7	11.2	2	*
* 2488.0	34.0	80	1.0	234	11.4	11.2	4	*
* 2490.0	33.2	82	1.0	235	11.4	11.2	4	*

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*          *   FORMATION          *           BOREHOLE           *   QUAL.   *
*          *-----*-----*           *           *   INDEX   *
* DEPTH  *   DIP    DIP    *   DEV.    DEV.    DIAM    DIAM    * BEST     *
*          *          AZI.   *          AZI.    1-3    2-4    * =4      *
*****
* 2582.0          0.8    227    11.6    12.4          *
* 2584.0    3.2    360    0.8    227    11.7    12.7    1   *
* 2585.0    3.9    82    0.8    227    11.6    12.9    1   *
* 2588.0    2.5    46    0.9    226    11.5    12.9    1   *
* 2590.0    3.3    13    0.8    226    11.5    13.0    1   *
* 2592.0          0.9    226    10.9    12.8          *
* 2594.0          0.9    227    10.7    12.7          *
* 2596.0          0.8    231    9.9    12.4          *
* 2598.0          0.7    232    8.8    12.0          *
* 2600.0          0.7    229    8.6    11.7          *
* 2602.0          0.6    227    8.8    11.6          *
* 2604.0    20.3    85    0.6    226    8.8    11.5    3   *
* 2606.0    25.0    80    0.7    227    9.0    11.7    3   *
* 2608.0    21.9    80    0.8    229    9.2    11.9    3   *
* 2610.0    19.1    80    0.8    230    9.3    11.8    1   *
* 2612.0          0.8    230    9.4    11.6          *
* 2614.0    39.1    34    0.8    230    9.9    11.9    1   *
* 2616.0    37.7    37    0.8    231    10.5    12.3    3   *
* 2618.0          0.8    231    10.6    12.4          *
* 2620.0          0.8    231    10.8    12.6          *
* 2622.0          0.9    230    11.0    12.8          *
* 2624.0    20.3    102    0.9    230    11.0    12.8    3   *
* 2626.0    12.4    125    0.8    230    11.3    12.8    1   *
* 2628.0    13.3    159    0.8    229    11.6    13.0    1   *
* 2630.0    14.0    144    0.8    228    11.5    13.1    1   *
* 2632.0    27.0    98    0.8    226    11.0    12.8    1   *
* 2634.0    11.4    114    0.7    225    10.9    12.5    1   *
* 2636.0    14.3    134    0.7    224    10.9    12.6    3   *
* 2638.0    21.3    100    0.8    223    10.2    12.5    3   *
* 2640.0    21.0    135    0.7    221    9.8    12.3    1   *
* 2642.0          0.7    222    10.2    12.3          *
* 2644.0          0.8    225    10.9    12.6          *
* 2646.0          0.8    226    11.2    12.9          *
* 2648.0          0.8    226    11.2    13.2          *
* 2650.0          0.8    227    11.2    13.3          *
* 2652.0    28.5    85    0.8    227    11.2    13.3    1   *
* 2654.0    28.9    91    0.8    228    11.2    13.3    3   *
* 2656.0    33.9    89    0.9    229    11.0    13.3    3   *
* 2658.0          0.9    229    10.9    13.3          *
* 2660.0          0.9    228    11.0    13.4          *
* 2662.0          0.9    228    11.0    13.4          *
* 2664.0          0.9    226    11.0    13.3          *
* 2666.0          0.8    226    10.6    13.1          *
* 2668.0          0.9    226    10.5    13.0          *
* 2670.0          0.8    225    10.7    13.1          *
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*          *   FORMATION          *           BOPFHOLE           *   QUAL.   *
*          *-----*-----*           * INDEX     *
* DEPTH   *   DIP   DIP   *   DEV.   DEV.   DIAM   DIAM   * REST     *
*          *       AZI. *       AZI.   1-3   2-4   * =4       *
*****
* 2672.0          0.8   225   10.7   13.0          *
* 2674.0          0.9   225   10.6   13.1          *
* 2676.0          0.9   225   10.3   13.4          *
* 2678.0          0.9   228   10.1   13.6          *
* 2680.0          0.9   229   10.0   13.6          *
* 2682.0   10.8     39    0.9   230   10.1   13.7   1   *
* 2684.0    8.3    209   0.9   231    9.7   13.6   1   *
* 2686.0    8.5     49   0.9   230    9.3   13.5   3   *
* 2688.0    8.8    212   1.0   229    9.7   13.6   1   *
* 2690.0          0.9   229   10.2   13.8          *
* 2692.0   20.2     89   0.8   230   10.1   13.7   3   *
* 2694.0   20.3     93   0.8   230    9.1   13.5   3   *
* 2696.0          0.7   229    7.5   13.0          *
* 2698.0          0.7   229    8.2   12.8          *
* 2700.0   12.3     75   0.9   228   10.2   13.2   1   *
* 2702.0    8.9     94   0.9   228   10.6   13.5   1   *
* 2704.0   17.1    101   0.9   229   10.7   13.6   1   *
* 2706.0   28.5    115   1.0   230   10.1   13.5   1   *
* 2708.0          1.0   231    9.6   13.5          *
* 2710.0   25.4    106   1.0   231    9.3   13.5   1   *
* 2712.0   10.0     86   1.0   231    9.1   13.4   1   *
* 2714.0   15.4     81   1.0   233    9.5   13.6   1   *
* 2716.0   13.2     83   1.0   234    9.3   13.6   3   *
* 2718.0   17.0     76   1.0   235    9.2   13.5   3   *
* 2720.0   16.3     92   1.0   235    9.6   13.5   1   *
* 2722.0   19.6     87   1.0   234    9.8   13.6   3   *
* 2724.0   19.7     97   1.0   233    9.7   13.6   3   *
* 2726.0   17.7    110   0.9   232    9.6   13.6   1   *
* 2728.0   17.8    107   0.9   232    9.8   13.4   1   *
* 2730.0   28.1    112   0.8   232    9.6   13.1   1   *
* 2732.0   25.0    105   0.8   232    9.8   13.2   1   *
* 2734.0   15.8     94   0.8   232   10.1   13.3   3   *
* 2736.0    8.9     96   0.8   234    9.5   13.3   1   *
* 2738.0   10.6     88   0.8   235    8.2   13.1   1   *
* 2740.0          1.0   234    8.3   12.9          *
* 2742.0          1.0   235    9.2   13.1          *
* 2744.0          1.0   235    9.6   13.3          *
* 2746.0   20.0     49   1.0   234   10.0   13.5   1   *
* 2748.0   22.2     49   1.0   234   10.1   13.5   1   *
* 2750.0   23.2     47   1.0   234    9.5   13.3   1   *
* 2752.0          1.0   233    9.3   13.2          *
* 2754.0          1.0   233    9.6   13.2          *
* 2756.0   51.0    135   1.0   234    9.8   13.3   3   *
* 2758.0   17.9     57   1.0   234    9.8   13.1   1   *
* 2760.0          0.9   232    9.8   12.9          *
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* DEPTH	* DIP	* DIP	* DEV.	* DEV.	* DIAM	* DIAM	* QUAL.	* INDEX
		AZI.		AZI.	1-3	2-4		=4
* 2762.0			0.9	232	9.7	13.1		*
* 2764.0	21.9	71	0.9	234	9.7	13.2	2	*
* 2766.0	17.6	85	1.0	235	9.7	13.1	2	*
* 2768.0	32.8	68	1.0	237	9.4	13.1	2	*
* 2770.0	17.4	103	1.0	239	9.4	13.2	4	*
* 2772.0	20.6	78	1.0	241	9.3	13.2	4	*
* 2774.0	22.3	75	1.0	242	8.4	13.1	4	*
* 2776.0	28.6	87	1.1	241	7.7	12.9	4	*
* 2778.0	26.3	87	1.1	238	9.3	12.9	4	*
* 2780.0			1.0	237	8.9	12.8		*
* 2782.0	23.1	104	1.0	237	8.4	12.8	3	*
* 2784.0	23.8	100	1.0	237	8.0	12.9	3	*
* 2786.0			1.1	237	8.6	12.9		*
* 2788.0	19.4	58	1.0	239	8.9	12.8	1	*
* 2790.0			0.8	238	7.2	12.4		*
* 2792.0	23.0	107	0.9	237	6.2	12.2	1	*
* 2794.0	25.4	99	1.0	238	7.3	12.2	1	*
* 2796.0	27.7	105	1.0	238	8.6	12.4	1	*
* 2798.0	24.2	99	1.1	236	9.1	12.4	1	*
* 2800.0			1.1	236	9.3	12.6		*
* 2802.0			1.1	237	9.3	12.9		*
* 2804.0			1.1	235	9.3	13.0		*
* 2806.0			1.1	235	9.2	13.0		*
* 2808.0			1.1	237	9.1	12.9		*
* 2810.0			1.1	241	8.9	12.8		*
* 2812.0	15.7	100	1.0	243	8.8	12.6	1	*
* 2814.0	15.3	100	1.0	243	8.3	12.5	1	*
* 2816.0	18.8	104	1.0	245	6.7	12.4	1	*
* 2818.0			1.0	246	5.4	12.2		*
* 2820.0			1.0	246	5.5	12.0		*
* 2822.0	21.1	76	1.1	243	6.3	11.9	1	*
* 2824.0	26.0	85	1.2	241	7.3	11.9	3	*
* 2826.0	31.8	81	1.1	239	7.6	12.0	3	*
* 2828.0			1.2	239	8.1	12.0		*
* 2830.0	24.3	105	1.2	238	8.6	12.0	1	*
* 2832.0	22.5	99	1.2	238	8.2	12.0	3	*
* 2834.0	16.8	83	1.2	238	8.0	12.1	1	*
* 2836.0			1.2	239	8.2	12.1		*
* 2838.0	28.8	96	1.2	241	7.9	12.1	3	*
* 2840.0	28.3	92	1.2	245	8.0	12.1	3	*
* 2842.0	24.3	113	1.2	245	8.4	12.1	4	*
* 2844.0	25.3	96	1.2	244	8.3	12.0	4	*
* 2846.0	17.0	106	1.2	244	7.7	12.1	2	*
* 2848.0			1.2	243	7.1	12.0		*
* 2850.0			1.2	243	7.6	11.9		*

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*          * FORMATION *          BOREHOLE *          * QUAL. *
*          *-----*          *-----*          * INDEX *
* DEPTH *  DIP   DIP   *  DEV.   DEV.   DIAM   DIAM * BEST *
*          *     AZI. *          *     AZI. *          *  =4  *
*****
* 2852.0 *          *          *  1.1   244   8.2   11.8 *          *
* 2854.0 * 25.4   107 *          *  1.1   245   8.3   11.7 * 4 *
* 2856.0 *          *          *  1.2   246   8.3   11.6 *          *
* 2858.0 * 23.3   116 *          *  1.2   245   8.3   11.6 * 4 *
* 2860.0 * 23.7   92  *          *  1.2   244   8.4   11.6 * 4 *
* 2862.0 * 18.2   98  *          *  1.2   244   8.4   11.8 * 3 *
* 2864.0 * 16.1   89  *          *  1.2   245   8.4   12.0 * 1 *
* 2866.0 * 28.2   76  *          *  1.2   246   8.5   11.9 * 1 *
* 2868.0 *          *          *  1.2   246   8.8   12.0 *          *
* 2870.0 * 18.1   103 *          *  1.2   246   8.7   11.9 * 1 *
* 2872.0 * 13.9   80  *          *  1.2   246   8.1   11.6 * 3 *
* 2874.0 * 17.3   89  *          *  1.2   246   7.5   11.2 * 3 *
* 2876.0 * 19.2   86  *          *  1.2   247   7.2   11.2 * 3 *
* 2878.0 *          *          *  1.2   247   7.8   11.4 *          *
* 2880.0 *          *          *  1.2   247   8.6   11.5 *          *
* 2882.0 * 19.6   96  *          *  1.2   247   8.4   11.5 * 1 *
* 2884.0 * 24.4   99  *          *  1.2   248   8.1   11.3 * 1 *
* 2886.0 * 25.9   94  *          *  1.2   247   7.8   11.0 * 3 *
* 2888.0 * 23.7   96  *          *  1.2   247   7.9   10.9 * 3 *
* 2890.0 *          *          *  1.2   247   8.3   10.9 *          *
* 2892.0 *          *          *  1.3   246   8.2   11.0 *          *
* 2894.0 *          *          *  1.2   247   8.0   11.0 *          *
* 2896.0 * 28.4   83  *          *  1.2   248   8.0   11.0 * 1 *
* 2898.0 * 27.2   88  *          *  1.3   248   8.3   11.0 * 1 *
* 2900.0 *          *          *  1.3   249   8.5   11.1 *          *
* 2902.0 *          *          *  1.3   249   8.6   11.0 *          *
* 2904.0 * 18.3   105 *          *  1.3   250   8.1   10.6 * 1 *
* 2906.0 * 23.1   101 *          *  1.3   252   7.9   10.3 * 1 *
* 2908.0 * 23.0   120 *          *  1.2   252   8.2   10.3 * 3 *
* 2910.0 * 23.4   115 *          *  1.2   251   8.2   10.3 * 3 *
* 2912.0 * 17.2   111 *          *  1.3   251   8.2   10.3 * 1 *
* 2914.0 * 25.1   119 *          *  1.3   252   8.1   10.2 * 1 *
* 2916.0 * 25.3   106 *          *  1.3   252   8.0   10.2 * 1 *
* 2918.0 *          *          *  1.3   251   7.9   9.9  *          *
* 2920.0 *          *          *  1.3   252   8.0   9.6  *          *
* 2922.0 *          *          *  1.3   253   8.2   9.6  *          *
* 2924.0 *          *          *  1.3   254   8.3   9.8  *          *
* 2926.0 *          *          *  1.3   254   8.2   9.8  *          *
* 2928.0 *          *          *  1.3   254   8.1   9.8  *          *
* 2930.0 *          *          *  1.4   254   8.1   9.7  *          *
* 2932.0 *          *          *  1.4   253   7.9   9.4  *          *
* 2934.0 *          *          *  1.3   253   7.4   8.9  *          *
* 2936.0 *          *          *  1.2   254   6.9   8.5  *          *
* 2938.0 *          *          *  1.2   254   7.0   8.3  *          *
* 2940.0 *          *          *  1.2   255   7.2   8.3  *          *
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*          *   FORMATION   *           BOREHOLE           *   QUAL.   *
*          *-----*-----*-----*-----*-----*-----*-----*-----*
* DEPTH  *   DIP     DIP   *   DEV.   DEV.   DIAM   DIAM   * BEST   *
*          *         AZI.  *         AZI.   1-3   2-4   * =4     *
*****
* 2942.0  26.8     103   *   1.3   255   7.3   8.3   * 1     *
* 2944.0           *   1.3   256   7.4   8.5   *      *
* 2946.0           *   1.3   257   7.2   8.1   *      *
* 2948.0           *   1.3   258   7.2   8.1   *      *
* 2950.0  31.0     93    *   1.3   258   7.2   8.0   * 1     *
* 2952.0  26.6     96    *   1.3   257   7.2   8.0   * 3     *
* 2954.0  20.3    106   *   1.3   256   7.1   7.9   * 1     *
* 2956.0           *   1.3   256   7.2   7.7   *      *
* 2958.0           *   1.3   256   7.4   7.7   *      *
* 2960.0           *   1.3   256   7.5   7.8   *      *
* 2962.0  12.8    117   *   1.4   256   7.5   7.9   * 1     *
* 2964.0           *   1.3   256   7.5   8.0   *      *
* 2966.0   9.5     106   *   1.3   256   7.4   7.9   * 1     *
* 2968.0  12.6     84    *   1.3   255   7.4   7.8   * 3     *
* 2970.0  14.9     82    *   1.4   252   7.5   7.8   * 1     *
* 2972.0  14.6     97    *   1.3   251   7.7   7.8   * 3     *
* 2974.0  11.3     97    *   1.3   252   7.8   7.8   * 3     *
* 2976.0  11.1    148   *   1.3   254   7.8   7.8   * 1     *
* 2978.0           *   1.3   254   7.8   7.8   *      *
* 2980.0           *   1.4   254   7.9   7.9   *      *
* 2982.0           *   1.3   257   8.0   8.0   *      *
* 2984.0           *   1.3   254   8.1   8.0   *      *
* 2986.0           *   1.3   256   8.0   8.0   *      *
* 2988.0           *   1.3   256   7.9   7.9   *      *
* 2990.0           *   1.3   255   7.8   7.8   *      *
* 2992.0           *   1.3   254   7.8   7.9   *      *
* 2994.0           *   1.3   256   7.8   7.9   *      *
* 2996.0           *   1.3   258   7.7   7.9   *      *
* 2998.0           *   1.3   258   7.6   7.9   *      *
* 3000.0           *   1.3   258   7.5   7.8   *      *
* 3002.0  38.6     94    *   1.3   256   7.4   7.7   * 1     *
* 3004.0  17.6     86    *   1.3   251   7.3   7.7   * 1     *
* 3006.0  19.3     64    *   1.3   252   7.5   7.7   * 1     *
* 3008.0  26.0     77    *   1.3   258   7.6   7.8   * 1     *
* 3010.0  17.8     77    *   1.3   261   7.9   8.0   * 3     *
* 3012.0           *   1.3   261   8.1   8.1   *      *
* 3014.0           *   1.2   262   8.3   8.3   *      *
* 3016.0           *   1.2   262   8.4   8.4   *      *
* 3018.0  32.6     94    *   1.3   263   8.4   8.5   * 3     *
* 3020.0  34.0     87    *   1.2   263   8.4   8.6   * 1     *
* 3022.0  16.2    100   *   1.2   263   8.4   8.5   * 1     *
* 3024.0  18.3     77    *   1.2   264   8.2   8.4   * 1     *
* 3026.0  20.4     52    *   1.2   264   7.9   8.3   * 1     *
* 3028.0           *   1.2   265   8.0   8.2   *      *
* 3030.0  16.5     72    *   1.2   265   8.2   8.3   * 1     *
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*          *   FORMATION   *           BOREHOLE           *   QUAL.   *
*          *-----*-----*-----*-----*-----*-----*-----*-----*
* DEPTH *   DIP   DIP   *   DEV.   DEV.   DIAM   DIAM   * BEST *
*          *   AZI.  *   AZI.   1-3   2-4   *   =4   *
*****
* 3032.0  26.9   104   1.2   265   8.3   8.3   3   *
* 3034.0  16.7   76    1.2   264   8.2   8.3   3   *
* 3036.0                1.2   263   7.9   8.3   *
* 3038.0                1.2   262   8.0   8.2   *
* 3040.0                1.2   262   8.3   7.9   *
* 3042.0                1.2   262   8.2   7.7   *
* 3044.0                1.2   263   7.9   7.6   *
* 3046.0                1.2   263   7.7   7.6   *
* 3048.0                1.2   261   7.7   7.5   *
* 3050.0                1.2   262   7.7   7.4   *
* 3052.0                1.2   261   7.7   7.1   *
* 3054.0                1.2   261   7.6   7.0   *
* 3056.0                1.2   263   7.5   7.0   *
* 3058.0                1.2   263   7.4   6.9   *
* 3060.0                1.2   263   7.4   7.1   *
* 3062.0                1.2   261   7.5   7.3   *
* 3064.0                1.2   265   7.5   7.2   *
* 3066.0                1.2   266   7.3   7.1   *
* 3068.0                1.2   269   7.2   7.0   *
* 3070.0                1.2   270   7.0   6.9   *
* 3072.0                1.2   269   7.0   7.0   *
* 3074.0                1.3   269   7.0   7.1   *
* 3076.0                1.3   268   6.9   7.1   *
* 3078.0                1.3   266   7.0   7.1   *
* 3080.0                1.3   265   7.1   7.1   *
* 3082.0  28.2   82    1.3   266   7.1   7.1   1   *
* 3084.0  30.1   79    1.3   265   7.2   7.2   3   *
* 3086.0  30.3   78    1.3   264   7.5   7.5   3   *
* 3088.0                1.2   266   7.9   7.8   *
* 3090.0                1.2   268   8.0   8.0   *
* 3092.0                1.3   269   8.1   8.2   *
* 3094.0                1.3   269   7.9   8.1   *
* 3096.0                1.4   268   7.7   8.0   *
* 3098.0  30.6   73    1.4   268   7.5   8.1   3   *
* 3100.0  26.6   56    1.4   267   7.6   8.2   1   *
* 3102.0                1.4   265   8.1   8.1   *
* 3104.0                1.5   265   8.5   8.0   *
* 3106.0                1.5   265   8.4   8.0   *
* 3108.0                1.5   263   8.1   8.0   *
* 3110.0                1.6   263   7.9   7.9   *
* 3112.0                1.6   262   7.6   7.7   *
* 3114.0                1.6   262   7.3   7.3   *
* 3116.0                1.5   261   7.2   7.3   *
* 3118.0                1.5   262   7.4   7.5   *
* 3120.0                1.4   264   8.1   7.6   *
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* FORMATION *			* BOREHOLE *				* QUAL. *		
*-----*									
* DEPTH *	* DIP *	DIP	* DEV. *	DEV.	DIAM	DIAM	* BEST *	* INDEX *	
* *	* AZI. *		* AZI. *		1-3	2-4	* =4 *	* *	
*****									
* 3122.0			1.4	266	8.2	7.5			*
* 3124.0			1.6	266	7.9	7.3			*
* 3126.0			1.6	266	7.7	7.1			*
* 3128.0			1.6	266	7.4	6.9			*
* 3130.0	36.3	81	1.6	265	7.2	6.8	3		*
* 3132.0	36.2	82	1.5	265	7.0	6.8	1		*
* 3134.0	37.8	88	1.5	266	7.0	6.9	1		*
* 3136.0	31.5	82	1.4	266	7.2	6.9	1		*
* 3138.0	31.2	78	1.5	265	7.8	7.1	1		*
* 3140.0			1.5	265	8.0	7.2			*
* 3142.0			1.4	265	7.7	7.3			*
* 3144.0			1.4	265	7.8	7.6			*
* 3146.0			1.4	267	8.1	7.8			*
* 3148.0			1.5	267	8.2	7.8			*
* 3150.0			1.5	267	8.4	7.9			*
* 3152.0	30.9	71	1.5	267	8.6	7.9	1		*
* 3154.0	29.3	72	1.5	267	8.8	7.9	3		*
* 3156.0			1.6	267	8.7	7.9			*
* 3158.0			1.6	267	8.8	7.8			*
* 3160.0			1.6	267	8.9	7.6			*
* 3162.0			1.6	266	8.6	7.4			*
* 3164.0	33.0	76	1.6	267	8.1	7.1	1		*
* 3166.0	33.6	74	1.6	268	7.7	6.9	1		*
* 3168.0	35.9	72	1.6	268	7.7	6.8	3		*
* 3170.0	35.3	71	1.6	268	7.9	6.8	1		*
* 3172.0	32.4	67	1.6	268	7.6	6.6	1		*
* 3174.0	34.1	78	1.6	267	7.1	6.5	1		*
* 3176.0	36.8	74	1.6	266	6.9	6.4	1		*
* 3178.0			1.6	267	6.8	6.5			*
* 3180.0	42.4	77	1.6	267	6.9	6.6	1		*
* 3182.0			1.6	267	7.4	6.8			*
* 3184.0	29.1	70	1.6	268	7.9	7.1	1		*
* 3186.0	40.6	87	1.6	270	7.9	7.3	3		*
* 3188.0	35.8	77	1.6	270	7.9	7.5	1		*
* 3190.0	34.6	78	1.6	271	8.1	7.6	1		*
* 3192.0	25.5	74	1.6	271	8.2	7.8	1		*
* 3194.0			1.6	271	8.4	7.8			*
* 3196.0			1.6	270	8.7	7.8			*
* 3198.0	38.7	75	1.7	269	8.5	7.7	1		*
* 3200.0			1.7	269	8.2	7.6			*
* 3202.0	23.7	64	1.7	268	8.0	7.6	1		*
* 3204.0	28.0	72	1.7	268	7.5	7.3	3		*
* 3206.0			1.7	268	7.2	7.0			*
* 3208.0			1.7	268	7.0	6.9			*
* 3210.0			1.8	269	7.1	7.0			*
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FORMATION			BOREHOLE				QUAL.	INDEX	
DEPTH	DIP	DIP	DEV.	DEV.	DIAM	DIAM	REST		
		AZI.		AZI.	1-3	2-4	=4		
*	3212.0		1.7	270	7.8	7.4	*		
*	3214.0	24.6	56	1.7	271	8.4	7.7	1	*
*	3216.0	26.9	56	1.8	272	8.9	7.7	1	*
*	3218.0	30.6	65	1.8	272	8.9	7.6	3	*
*	3220.0	28.2	61	1.7	268	8.8	7.6	1	*
*	3222.0			1.7	266	8.2	7.3		*
*	3224.0			1.7	266	7.1	6.7		*
*	3226.0			1.6	266	6.9	6.6		*
*	3228.0			1.6	267	7.3	6.9		*
*	3230.0			1.6	268	7.7	7.2		*
*	3232.0			1.7	267	8.1	7.5		*
*	3234.0			1.7	265	8.1	7.4		*
*	3236.0			1.7	264	7.6	7.2		*
*	3238.0	16.8	72	1.7	265	7.4	7.1	3	*
*	3240.0	17.3	70	1.8	265	7.7	7.3	1	*
*	3242.0			1.8	264	8.0	7.4		*
*	3244.0			1.8	263	8.1	7.4		*
*	3246.0			1.8	263	8.1	7.6		*
*	3248.0			1.8	263	8.3	7.6		*
*	3250.0			1.8	265	7.8	7.3		*
*	3252.0			1.8	266	7.4	7.0		*
*	3254.0			1.8	266	7.5	7.1		*
*	3256.0			1.8	265	7.5	7.2		*
*	3258.0			1.8	265	7.3	6.9		*
*	3260.0			1.8	264	7.1	6.8		*
*	3262.0			1.8	265	7.0	6.7		*
*	3264.0			1.8	265	6.9	6.7		*
*	3266.0			1.9	265	7.0	6.7		*
*	3268.0			1.9	266	7.1	6.7		*
*	3270.0			1.9	266	7.3	7.2		*
*	3272.0			2.0	264	8.3	7.6		*
*	3274.0			2.0	262	8.5	7.6		*
*	3276.0			2.0	262	8.5	8.1		*
*	3278.0			2.0	263	8.3	8.2		*
*	3280.0			1.9	265	7.9	7.4		*
*	3282.0			1.8	266	7.3	6.9		*
*	3284.0			1.8	267	6.9	6.8		*
*	3286.0			1.8	266	6.9	6.8		*
*	3288.0			1.8	265	6.8	6.7		*
*	3290.0			1.8	262	6.7	6.6		*
*	3292.0			1.8	262	6.7	6.6		*
*	3294.0			1.8	267	6.6	6.7		*
*	3296.0			1.8	269	7.0	6.9		*
*	3298.0			1.8	269	7.0	7.0		*
*	3300.0			1.9	268	7.1	7.2		*

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*          *   FORMATION   *           BOREHOLE           *   QUAL.   *
*          *-----*-----*           *           *   INDEX   *
* DEPTH  *   DIP   DIP   *   DEV.   DEV.   DIAM   DIAM   *   BEST   *
*          *   AZI.  *   AZI.   1-3   2-4   *   =4   *
*****
* 3482.0  35.2   77      2.3   267    6.9   7.8   1   *
* 3484.0          2.3   265    7.0   7.7   *
* 3486.0          2.4   265    7.2   7.7   *
* 3488.0          2.4   267    7.6   7.8   *
* 3490.0          2.4   268    8.4   8.4   *
* 3492.0          2.4   267    8.7   8.4   *
* 3494.0          2.3   267    6.4   7.9   *
* 3496.0  32.0   73      2.3   267    7.8   7.4   1   *
* 3498.0  36.2   78      2.3   266    7.3   6.8   1   *
* 3500.0  32.8   85      2.3   266    7.8   7.1   3   *
* 3502.0          2.4   265    8.6   7.8   *
* 3504.0          2.4   265    8.9   8.1   *
* 3506.0          2.4   267    8.8   8.0   *
* 3508.0          2.4   267    9.0   7.9   *
* 3510.0          2.4   266    9.2   8.0   *
* 3512.0          2.4   265    9.2   8.0   *
* 3514.0          2.4   266    9.3   7.9   *
* 3516.0          2.4   268    9.4   8.0   *
* 3518.0          2.3   268    9.3   8.0   *
* 3520.0          2.2   260    9.0   7.7   *
* 3522.0          2.3   266    8.9   7.7   *
* 3524.0          2.3   266    9.2   8.1   *
* 3526.0          2.3   267    9.1   8.1   *
* 3528.0          2.4   266    8.7   7.9   *
* 3530.0          2.4   266    9.0   8.1   *
* 3532.0          2.4   268    9.1   8.2   *
* 3534.0          2.4   268    9.0   8.3   *
* 3536.0          2.4   267    9.0   8.5   *
* 3538.0          2.4   267    8.9   8.4   *
* 3540.0          2.4   264    8.6   8.2   *
* 3542.0  22.8   56      2.4   264    8.2   8.1   1   *
* 3544.0  20.8   38      2.4   271    7.8   8.0   1   *
* 3546.0          2.3   272    7.7   8.0   *
* 3548.0          2.3   271    7.7   8.1   *
* 3550.0          2.2   270    7.8   8.2   *
* 3552.0          2.1   269    7.6   8.2   *
* 3554.0  20.3   23      2.0   268    7.5   8.1   1   *
* 3556.0  17.7   20      2.0   267    7.6   8.0   3   *
* 3558.0  19.6   22      2.0   267    7.6   8.2   3   *
* 3560.0  26.7    7      2.0   266    6.9   8.2   3   *
* 3562.0  26.6   75      2.0   265    6.7   8.3   1   *
* 3564.0  19.0   67      2.0   266    7.3   8.4   3   *
* 3566.0  25.5   33      2.0   267    7.5   8.1   1   *
* 3568.0  25.5   75      2.0   267    7.4   7.8   1   *
* 3570.0  21.3   32      2.0   267    7.4   7.8   3   *
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* FORMATION *		* BOREHOLE *				* QUAL. *	* INDEX *
* DEPTH *	* DIP *	DIP	* DEV. *	DEV.	DIAM	DIAM	* BEST *
		AZI.	* AZI. *		1-3	2-4	* =4 *
* 3572.0			2.0	268	7.2	7.7	
* 3574.0	22.0	38	2.0	268	7.2	7.6	1
* 3576.0	27.3	63	2.1	268	7.2	7.7	1
* 3578.0	21.0	51	2.1	267	7.3	8.0	1
* 3580.0			2.1	266	7.3	8.2	
* 3582.0			2.1	265	7.3	8.2	
* 3584.0			2.0	266	7.3	8.1	
* 3586.0			2.0	271	7.3	7.7	
* 3588.0	29.4	31	2.0	272	7.2	7.3	3
* 3590.0	29.5	27	2.0	267	7.2	7.1	1
* 3592.0	27.9	18	2.0	266	7.2	7.0	1
* 3594.0	31.1	33	2.2	267	7.4	7.0	1
* 3596.0	25.9	24	2.3	268	7.5	7.0	3
* 3598.0	20.2	34	2.2	270	7.5	7.0	1
* 3600.0	23.4	39	2.2	271	8.0	7.6	3
* 3602.0			2.2	273	8.0	7.6	
* 3604.0	27.7	26	2.2	274	7.8	7.5	3
* 3606.0			2.3	275	7.8	8.1	
* 3608.0			2.4	274	7.5	8.1	
* 3610.0			2.4	272	7.2	7.7	
* 3612.0	27.6	25	2.5	272	7.3	7.7	3
* 3614.0			2.6	271	7.5	7.9	
* 3616.0			2.5	270	7.5	7.9	
* 3618.0			2.5	270	7.4	7.7	
* 3620.0			2.6	268	7.4	7.7	
* 3622.0			2.6	265	7.5	8.0	
* 3624.0			2.7	263	7.4	7.8	
* 3626.0	30.3	29	2.7	264	7.2	7.3	2
* 3628.0	37.2	23	2.7	265	7.2	7.2	2
* 3630.0	31.3	10	2.6	265	7.4	7.1	2
* 3632.0	27.6	14	2.6	265	7.5	7.1	4
* 3634.0	28.4	25	2.6	265	7.5	7.1	4
* 3636.0	26.3	21	2.6	266	7.3	7.0	4
* 3638.0	24.5	20	2.6	266	7.2	6.9	4
* 3640.0	13.9	44	2.5	264	7.2	6.9	3
* 3642.0	38.8	44	2.5	264	7.5	7.1	1
* 3644.0	41.1	40	2.5	264	7.8	7.2	3
* 3646.0	41.9	41	2.6	264	7.8	7.2	1
* 3648.0	13.3	54	2.5	264	8.0	7.4	1
* 3650.0	17.3	25	2.5	265	8.2	7.6	1
* 3652.0	16.2	27	2.5	266	8.0	7.5	3
* 3654.0			2.5	263	7.6	7.3	
* 3656.0	39.5	48	2.4	265	7.4	7.3	1
* 3658.0	38.8	33	2.4	270	7.4	7.8	1
* 3660.0	13.6	25	2.4	269	7.4	8.7	1

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*          * FORMATION *          * BOREHOLE *          * QUAL. *
*          *-----*          *-----*          * INDEX *
* DEPTH *  DIP   DIP   *  DEV.   DEV.   DIAM   DIAM * BEST *
*          *     AZI. *          *     AZI. *          * 1-3   2-4 * =4 *
*****
* 3932.0  29.6   60    *  2.5   265   7.3   7.6   1 *
* 3934.0  30.7   59    *  2.5   266   7.5   7.7   1 *
* 3936.0          *  2.5   265   7.7   7.9   *
* 3938.0          *  2.4   265   7.8   8.2   *
* 3940.0          *  2.4   265   7.9   8.3   *
* 3942.0          *  2.5   265   8.0   8.3   *
* 3944.0          *  2.5   264   8.5   8.4   *
* 3946.0          *  2.4   264   8.7   8.3   *
* 3948.0          *  2.5   265   8.4   8.3   *
* 3950.0          *  2.5   266   8.4   8.5   *
* 3952.0          *  2.5   266   8.2   8.5   *
* 3954.0          *  2.5   266   8.0   8.4   *
* 3956.0          *  2.5   265   8.0   8.4   *
* 3958.0          *  2.6   266   8.0   8.4   *
* 3960.0          *  2.6   265   8.0   8.3   *
* 3962.0          *  2.5   266   8.0   8.3   *
* 3964.0          *  2.5   269   8.7   8.5   *
* 3966.0          *  2.5   271   8.9   8.7   *
* 3968.0          *  2.5   269   8.7   8.7   *
* 3970.0          *  2.5   269   8.5   8.8   *
* 3972.0          *  2.5   274   8.5   9.0   *
* 3974.0          *  2.6   276   8.5   9.1   *
* 3976.0          *  2.6   273   8.3   9.1   *
* 3978.0          *  2.7   269   8.4   9.1   *
* 3980.0          *  2.7   266   8.4   9.1   *
* 3982.0  45.1   42    *  2.7   266   9.1   9.3   1 *
* 3984.0          *  2.7   269   9.3   9.2   *
* 3986.0  43.6   42    *  2.7   271   9.0   9.1   3 *
* 3988.0  43.8   39    *  2.7   269   8.8   9.0   3 *
* 3990.0          *  2.6   267   8.4   8.8   *
* 3992.0  42.7   34    *  2.6   267   8.3   8.8   1 *
* 3994.0  43.9   34    *  2.6   265   8.2   8.7   1 *
* 3996.0  44.3   45    *  2.7   265   8.1   8.7   1 *
* 3998.0          *  2.6   265   7.4   8.6   *
* 4000.0          *  2.5   265   6.9   8.3   *
* 4002.0          *  2.5   268   7.5   8.6   *
* 4004.0  34.2   358   *  2.6   268   8.3   9.1   1 *
* 4006.0  35.8   359   *  2.6   267   8.7   9.3   1 *
* 4008.0  59.1   34    *  2.6   269   8.9   9.2   3 *
* 4010.0  59.7   33    *  2.6   268   8.4   9.0   1 *
* 4012.0          *  2.6   268   8.2   9.0   *
* 4014.0          *  2.7   269   8.2   8.9   *
* 4016.0          *  2.7   268   8.3   8.6   *
* 4018.0          *  2.7   267   8.5   8.5   *
* 4020.0          *  2.7   268   8.7   8.7   *
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* DEPTH *	* DIP *	* DIP *	* DEV. *	* DEV. *	* DIAM 1-3 *	* DIAM 2-4 *	* QUAL. *	* INDEX *
* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *
* 4022.0			2.7	267	8.7	8.8		*
* 4024.0	47.9	23	2.6	267	8.3	8.7	1	*
* 4026.0			2.6	267	8.3	8.8		*
* 4028.0	44.6	20	2.7	267	8.3	9.0	1	*
* 4030.0	48.4	26	2.7	267	8.4	9.2	1	*
* 4032.0			2.7	266	8.3	9.1		*
* 4034.0			2.7	265	8.0	9.0		*
* 4036.0	47.9	18	2.8	266	7.8	8.9	1	*
* 4038.0			2.7	265	7.8	8.9		*
* 4040.0	44.4	21	2.7	266	7.8	8.8	1	*
* 4042.0			2.7	266	7.7	8.7		*
* 4044.0	51.4	55	2.7	266	7.7	8.4	3	*
* 4046.0			2.6	267	7.7	8.1		*
* 4048.0	49.5	49	2.6	267	7.7	7.9	1	*
* 4050.0			2.6	266	7.5	7.8		*
* 4052.0			2.6	266	7.3	7.8		*
* 4054.0			2.7	266	7.4	7.7		*
* 4056.0			2.7	266	7.7	7.9		*
* 4058.0	48.8	50	2.7	265	8.0	8.5	1	*
* 4060.0	47.0	51	2.7	264	8.3	9.0	1	*
* 4062.0	31.2	59	2.7	263	8.4	9.2	1	*
* 4064.0	30.4	60	2.8	262	8.1	9.3	3	*
* 4066.0	30.9	62	2.8	263	8.2	9.4	3	*
* 4068.0	57.6	226	2.8	264	8.6	9.4	3	*
* 4070.0	25.6	59	2.8	263	8.6	9.3	1	*
* 4072.0			2.8	264	8.7	9.4		*
* 4074.0	35.7	54	2.8	266	8.9	9.5	1	*
* 4076.0			2.8	267	8.9	9.3		*
* 4078.0	44.9	53	2.8	267	8.9	9.4	1	*
* 4080.0	35.6	73	2.8	267	8.9	9.6	1	*
* 4082.0			2.8	267	9.0	9.5		*
* 4084.0			2.8	266	8.9	9.4		*
* 4086.0			2.8	265	9.0	9.5		*
* 4088.0			2.8	263	9.0	9.9		*
* 4090.0			2.8	262	8.7	10.1		*
* 4092.0			2.8	262	8.3	9.6		*
* 4094.0			2.8	263	8.1	9.2		*
* 4096.0			2.8	264	8.2	9.3		*
* 4098.0	35.8	6	2.8	264	8.6	9.3	3	*
* 4100.0	35.8	5	2.8	267	8.9	9.5	1	*
* 4102.0			2.8	268	9.0	9.7		*
* 4104.0	31.8	48	2.8	269	8.9	9.5	3	*
* 4106.0	21.1	51	2.8	269	8.9	9.4	1	*
* 4108.0			2.8	269	8.9	9.4		*
* 4110.0			2.8	271	9.1	9.5		*

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* FORMATION *	* BOREHOLE *		* QUAL. *				
* ----- *	* INDEX *		* BEST *				
* DEPTH *	* DIP *	* DIP *	* DEV. *	* DEV. *	* DIAM *	* DIAM *	* =4 *
* *	* AZI. *	* AZI. *	* 1-3 *	* 2-4 *	* 1-3 *	* 2-4 *	* =4 *
* 4112.0			2.8	257	9.4	9.7	
* 4114.0	34.1	33	2.8	263	9.3	9.8	1
* 4116.0	26.3	45	2.8	263	8.7	9.6	1
* 4118.0			2.8	262	8.5	9.5	
* 4120.0			2.8	261	8.4	9.5	
* 4122.0			2.8	261	8.3	9.4	
* 4124.0			2.8	262	8.3	9.5	
* 4126.0			2.8	263	8.6	10.1	
* 4128.0			2.8	263	8.3	9.7	
* 4130.0			2.8	262	7.8	8.9	
* 4132.0			2.8	262	7.8	8.5	
* 4134.0			2.8	262	7.8	8.1	
* 4136.0			2.8	262	7.8	8.0	
* 4138.0			2.8	262	7.9	8.1	
* 4140.0			3.0	251	8.3	8.4	
* 4142.0			3.0	260	8.9	8.8	
* 4144.0			2.9	259	9.0	9.1	
* 4146.0			2.9	260	8.6	9.1	
* 4148.0			2.9	259	8.5	9.1	
* 4150.0			2.9	259	8.4	9.1	
* 4152.0			3.0	260	8.3	9.2	
* 4154.0			3.0	260	8.3	9.3	
* 4156.0			3.0	260	8.3	9.4	
* 4158.0			3.0	260	8.3	9.5	
* 4160.0			3.0	260	8.4	9.5	
* 4162.0	37.6	55	2.9	259	8.0	9.4	1
* 4164.0	34.7	57	2.9	259	7.6	8.9	1
* 4166.0			2.9	259	7.9	8.7	
* 4168.0			3.0	259	8.1	9.0	
* 4170.0			3.0	259	8.0	9.1	
* 4172.0			2.9	259	8.2	9.2	
* 4174.0	38.8	47	2.9	259	8.3	9.4	1
* 4176.0	42.4	45	2.9	259	8.2	9.4	1
* 4178.0	32.2	47	3.0	260	8.2	9.2	3
* 4180.0	29.3	48	3.0	260	8.1	9.1	3
* 4182.0			3.0	260	8.1	9.1	
* 4184.0			3.0	258	8.1	9.2	
* 4186.0			3.0	258	8.1	9.4	
* 4188.0			3.0	257	8.3	9.7	
* 4190.0			3.0	258	8.4	9.7	
* 4192.0			3.0	259	8.2	9.6	
* 4194.0			3.0	259	8.1	9.4	
* 4196.0			3.0	259	8.2	9.3	
* 4198.0			3.0	258	8.4	9.3	
* 4200.0			3.0	256	8.5	9.5	

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FORMATION			BOREHOLE				QUAL.		
DEPTH	DIP	DIP	DEV.	DEV.	DIAM	DIAM	BEST		
	AZI.		AZI.	1-3	2-4	=4	INDEX		
*	4218.0		2.9	254	6.7	8.8	*		
*	4220.0		3.0	255	7.8	9.4	*		
*	4222.0		3.0	255	8.3	9.5	*		
*	4224.0		3.0	256	8.2	9.4	*		
*	4226.0	23.0	43	3.1	256	8.1	9.1	1	*
*	4228.0		3.1	255	8.0	8.8	*		
*	4230.0	32.2	44	3.2	255	7.9	8.7	3	*
*	4232.0	32.9	44	3.2	256	7.9	8.6	3	*
*	4234.0	32.9	35	3.1	255	7.9	8.7	3	*
*	4236.0		3.1	253	7.9	8.8	*		
*	4238.0		3.1	253	7.9	8.8	*		
*	4240.0		3.1	253	7.9	8.3	*		
*	4242.0		3.2	251	7.9	8.0	*		
*	4244.0		3.2	254	7.9	8.1	*		
*	4246.0		3.3	253	8.0	8.4	*		
*	4248.0		3.3	252	8.3	8.9	*		
*	4250.0		3.2	252	8.8	9.1	*		
*	4252.0		3.2	253	8.9	9.1	*		
*	4254.0		3.2	253	8.7	9.1	*		
*	4256.0		3.2	253	8.5	9.0	*		
*	4258.0		3.2	254	8.5	8.8	*		
*	4260.0		3.1	253	7.9	8.9	*		
*	4262.0		3.1	253	7.8	9.0	*		
*	4264.0		3.2	254	8.3	8.9	*		
*	4266.0		3.2	254	8.7	8.8	*		
*	4268.0		3.2	255	8.9	8.8	*		
*	4270.0		3.2	257	8.9	8.7	*		
*	4272.0		3.2	255	9.0	8.5	*		
*	4274.0		3.3	253	8.7	8.1	*		
*	4276.0		3.3	253	8.4	8.1	*		
*	4278.0	35.9	29	3.3	251	8.3	8.0	4	*
*	4280.0	36.9	17	3.3	252	8.3	8.0	2	*
*	4282.0		3.3	252	8.3	8.0	*		
*	4284.0	29.7	44	3.3	251	8.3	8.0	2	*
*	4286.0	29.5	42	3.2	250	8.3	7.9	4	*
*	4288.0	34.2	32	3.3	249	8.3	7.9	4	*
*	4290.0	37.6	47	3.3	249	8.3	7.9	2	*
*	4292.0	36.1	41	3.3	249	8.2	7.8	4	*
*	4294.0	31.1	46	3.3	249	8.2	7.8	4	*
*	4296.0	30.7	45	3.3	250	8.3	7.9	4	*
*	4298.0		3.3	249	8.3	7.9	*		
*	4300.0		3.3	249	8.3	8.0	*		
*	4302.0		3.4	250	8.5	7.9	*		
*	4304.0		3.5	251	8.5	7.7	*		
*	4306.0		3.5	251	8.4	7.7	*		

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*          * FORMATION *          * BOREHOLE *          * QUAL. *
*          *-----*          *-----*          * INDEX *
* DEPTH *  DIP   DIP   *  DEV.   DEV.   DIAM   DIAM *  BEST  *
*          *     AZI. *          *     AZI. *          *  =4   *
*****
* 4488.0  36.4   70    *  4.4   255   9.4   8.4   *  3    *
* 4490.0  37.8   62    *  4.4   254   9.6   8.6   *  3    *
* 4492.0          *  4.4   254   9.8   8.8   *      *
* 4494.0          *  4.4   253   9.8   8.9   *      *
* 4496.0          *  4.4   253   9.6   9.0   *      *
* 4498.0          *  4.4   253   9.3   8.9   *      *
* 4500.0          *  4.4   251   9.4   8.8   *      *
* 4502.0          *  4.4   253   9.4   8.5   *      *
* 4504.0          *  4.3   251   9.1   7.4   *      *
* 4506.0          *  4.3   251   8.9   6.6   *      *
* 4508.0          *  4.3   250   8.8   6.4   *      *
* 4510.0          *  4.3   250   8.8   6.4   *      *
* 4512.0          *  4.3   251   8.7   6.4   *      *
* 4514.0          *  4.3   251   8.4   6.7   *      *
* 4516.0          *  4.4   251   8.5   8.1   *      *
* 4518.0          *  4.4   252   8.9   9.1   *      *
* 4520.0          *  4.5   251   9.0   9.5   *      *
* 4522.0          *  4.4   249   9.1   9.3   *      *
* 4524.0          *  4.4   249   8.9   9.0   *      *
* 4526.0          *  4.4   249   8.9   8.8   *      *
* 4528.0          *  4.5   249   8.8   8.7   *      *
* 4530.0          *  4.5   250   8.5   8.5   *      *
* 4532.0          *  4.5   249   8.3   8.4   *      *
* 4534.0          *  4.5   248   8.4   8.8   *      *
* 4536.0          *  4.5   249   8.7   8.9   *      *
* 4538.0  20.5   89    *  4.6   249   8.6   8.8   *  1    *
* 4540.0  29.8   95    *  4.6   250   8.4   8.4   *  3    *
* 4542.0  31.8   90    *  4.6   250   8.2   8.2   *  3    *
* 4544.0          *  4.6   249   8.0   8.1   *      *
* 4546.0          *  4.5   250   7.6   7.9   *      *
* 4548.0          *  4.5   250   7.3   7.7   *      *
* 4550.0  30.2   91    *  4.6   250   7.3   7.7   *  1    *
* 4552.0          *  4.6   250   7.7   7.9   *      *
* 4554.0          *  4.6   250   8.0   8.0   *      *
* 4556.0          *  4.6   250   7.6   7.9   *      *
* 4558.0          *  4.6   250   7.0   7.6   *      *
* 4560.0          *  4.5   251   6.6   7.5   *      *
* 4562.0          *  4.5   251   6.5   7.5   *      *
* 4564.0          *  4.5   249   6.6   7.5   *      *
* 4566.0          *  4.5   247   6.9   7.5   *      *
* 4568.0          *  4.5   247   7.4   7.4   *      *
* 4570.0          *  4.5   246   7.8   7.5   *      *
* 4572.0          *  4.4   246   8.0   7.6   *      *
* 4574.0          *  4.4   246   7.9   7.6   *      *
* 4576.0          *  4.4   246   7.9   7.7   *      *
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* FORMATION *	* BOREHOLE *		* QUAL. *				
*-----*	*-----*		* INDEX *				
* DEPTH * * * * *	* DIP * * * * *	* DIP * * * * *	* DEV. * * * * *	* DEV. * * * * *	* DIAM * * * * *	* DIAM * * * * *	* BEST * * * * *
* * * * *	* AZI. * * * * *	* * * * *	* AZI. * * * * *	* * * * *	* 1-3 * * * * *	* 2-4 * * * * *	* =4 * * * * *

* 4578.0			4.4	245	8.1	8.0	*
* 4580.0			4.5	245	8.2	8.2	*
* 4582.0	4.1	218	4.4	244	8.2	8.1	3 *
* 4584.0	5.0	238	4.4	244	8.4	7.8	1 *
* 4586.0	9.4	190	4.4	244	8.5	7.5	1 *
* 4588.0	10.4	282	4.4	242	8.5	7.4	1 *
* 4590.0			4.5	242	8.5	7.3	*
* 4592.0	6.8	188	4.4	242	8.6	7.1	1 *
* 4594.0			4.4	245	8.7	7.0	*
* 4596.0			4.4	246	8.7	6.9	*
* 4598.0			4.4	245	8.7	6.8	*
* 4600.0			4.5	244	8.6	6.7	*
* 4602.0			4.6	246	8.6	6.6	*
* 4604.0			4.5	245	8.6	6.8	*
* 4606.0			4.5	243	8.7	7.1	*
* 4608.0			4.6	240	8.9	7.2	*
* 4610.0			4.6	240	8.6	6.7	*
* 4612.0			4.5	244	8.4	6.3	*
* 4614.0			4.4	244	8.4	6.4	*
* 4616.0			4.4	242	8.3	6.5	*
* 4618.0			4.4	241	8.6	6.8	*
* 4620.0			4.5	240	9.2	7.0	*
* 4622.0			4.6	240	9.7	7.0	*
* 4624.0			4.5	239	9.8	7.0	*
* 4626.0			4.4	240	9.8	6.9	*
* 4628.0			4.5	240	9.8	6.9	*
* 4630.0			4.5	238	9.8	6.7	*
* 4632.0			4.6	238	9.5	6.5	*
* 4634.0			4.6	238	9.4	6.4	*
* 4636.0			4.5	238	9.6	6.7	*
* 4638.0			4.6	237	9.8	7.1	*
* 4640.0			4.6	236	9.9	7.4	*
* 4642.0			4.5	239	9.9	7.1	*
* 4644.0			4.5	238	9.9	6.9	*
* 4646.0			4.5	238	10.0	7.3	*
* 4648.0			4.4	242	10.0	7.5	*
* 4650.0			4.4	244	10.0	7.2	*
* 4652.0			4.5	241	10.1	7.1	*
* 4654.0			4.4	238	10.1	7.1	*
* 4656.0			4.4	244	10.3	7.3	*
* 4658.0			4.4	246	10.3	7.3	*
* 4660.0			4.4	241	10.4	7.3	*
* 4662.0			4.4	238	10.4	7.2	*
* 4664.0			4.5	240	10.4	7.1	*
* 4666.0			4.7	245	10.2	7.2	*

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*          * FORMATION *          * BOREHOLE *          * QUAL. *
*          *-----*          *-----*          * INDEX *
* DEPTH *  DIP   DIP   *  DEV.   DEV.   DIAM   DIAM * BEST *
*          *     AZI. *          *     AZI. *          *  =4 *
*****
* 4758.0          * 4.5   242   * 8.9   6.8   *
* 4760.0          * 4.5   241   * 9.1   6.9   *
* 4762.0          * 4.5   237   * 9.0   6.8   *
* 4764.0          * 4.5   237   * 8.8   6.6   *
* 4766.0          * 4.5   237   * 8.5   6.5   *
* 4768.0          * 4.5   236   * 8.6   6.9   *
* 4770.0          * 4.4   236   * 9.1   7.2   *
* 4772.0          * 4.4   236   * 9.3   7.1   *
* 4774.0          * 4.4   236   * 9.1   6.9   *
* 4776.0          * 4.4   236   * 8.9   6.5   *
* 4778.0          * 4.4   235   * 8.8   6.5   *
* 4780.0          * 4.4   235   * 8.9   6.6   *
* 4782.0          * 4.3   235   * 9.0   6.7   *
* 4784.0          * 4.3   235   * 9.3   6.9   *
* 4786.0          * 4.4   236   * 9.3   6.7   *
* 4788.0          * 4.4   235   * 9.1   6.8   *
* 4790.0          * 4.4   235   * 9.7   7.1   *
* 4792.0          * 4.3   236   * 10.1  7.4   *
* 4794.0          * 4.3   236   * 9.8   7.3   *
* 4796.0          * 4.2   238   * 9.1   6.8   *
* 4798.0          * 4.3   238   * 8.6   6.5   *
* 4800.0          * 4.3   237   * 8.7   6.7   *
* 4802.0          * 4.3   237   * 9.0   6.8   *
* 4804.0          * 4.3   235   * 9.1   6.6   *
* 4806.0          * 4.3   237   * 9.4   6.6   *
* 4808.0          * 4.4   241   * 9.6   7.0   *
* 4810.0          * 4.4   243   * 9.3   7.1   *
* 4812.0          * 4.3   243   * 9.0   7.0   *
* 4814.0          * 4.3   240   * 8.9   6.9   *
* 4816.0          * 4.3   243   * 8.8   6.8   *
* 4818.0          * 59.2  94    * 4.4   242   * 8.9   7.0   3 *
* 4820.0          * 4.4   241   * 9.2   7.2   *
* 4822.0          * 4.3   241   * 9.4   7.3   *
* 4824.0          * 20.8  242   * 4.3   242   * 9.3   7.2   1 *
* 4826.0          * 18.0  236   * 4.3   242   * 9.4   7.2   1 *
* 4828.0          * 4.3   239   * 9.2   7.1   *
* 4830.0          * 4.3   239   * 8.9   7.1   *
* 4832.0          * 4.3   239   * 8.8   7.1   *
* 4834.0          * 4.3   239   * 8.8   7.1   *
* 4836.0          * 4.4   241   * 9.3   7.4   *
* 4838.0          * 4.4   245   * 9.4   7.4   *
* 4840.0          * 4.4   241   * 9.3   7.0   *
* 4842.0          * 4.4   241   * 9.2   6.8   *
* 4844.0          * 4.4   242   * 9.0   6.7   *
* 4846.0          * 4.4   238   * 8.7   6.5   *
*****

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*****									
* FORMATION *					* BOREHOLE *			* QUAL. *	
* ----- * INDEX *									
* DEPTH *	* DIP *	* DIP *	* DEV. *	* DEV. *	* DIAM *	* DIAM *	* REST *		
		AZI.		AZI.	1-3	2-4	=4		
*****									
* 4848.0			4.4	241	8.9	6.8			*
* 4850.0			4.4	241	9.2	7.4			*
* 4852.0			4.4	242	9.4	7.6			*
* 4854.0			4.3	245	9.5	7.3			*
* 4856.0			4.3	246	9.9	7.2			*
* 4858.0			4.3	244	10.0	7.3			*
* 4860.0			4.3	242	9.8	7.4			*
* 4862.0			4.3	240	9.7	7.3			*
* 4864.0			4.3	244	9.9	7.2			*
* 4866.0			4.4	245	9.9	7.1			*
* 4868.0			4.4	242	9.5	6.9			*
* 4870.0			4.4	241	9.5	6.9			*
* 4872.0			4.4	240	9.2	6.9			*
* 4874.0			4.3	241	9.0	7.0			*
* 4876.0			4.4	242	9.4	7.5			*
* 4878.0			4.4	240	9.6	7.5			*
* 4880.0			4.4	239	9.4	7.4			*
* 4882.0			4.3	239	9.4	7.2			*
* 4884.0			4.3	242	9.6	7.1			*
* 4886.0			4.3	244	9.7	7.2			*
* 4888.0			4.3	241	9.7	7.0			*
* 4890.0			4.3	241	9.1	6.8			*
* 4892.0			4.3	243	8.7	6.9			*
* 4894.0			4.4	240	9.2	6.8			*
* 4896.0			4.4	238	9.6	7.0			*
* 4898.0			4.4	240	9.8	7.3			*
* 4900.0			4.4	239	9.6	7.1			*
* 4902.0	29.4	31	4.4	236	9.2	7.0	1		*
* 4904.0	30.8	30	4.3	235	8.9	6.8	1		*
* 4906.0			4.3	235	9.1	6.7			*
* 4908.0			4.3	237	9.2	6.9			*
* 4910.0			4.2	237	9.0	7.0			*
* 4912.0			4.2	236	8.8	6.9			*
* 4914.0			4.3	236	9.0	6.7			*
* 4916.0			4.2	237	9.2	6.6			*
* 4918.0			4.1	236	9.1	6.6			*
* 4920.0			4.1	235	8.9	6.6			*
* 4922.0			4.2	235	8.7	6.6			*
* 4924.0			4.2	235	8.5	6.6			*
* 4926.0			4.1	236	8.4	6.6			*
* 4928.0			4.2	236	8.3	6.6			*
* 4930.0			4.2	236	8.1	6.5			*
* 4932.0			4.3	236	7.8	6.5			*
* 4934.0			4.2	236	7.8	6.5			*
* 4936.0			4.1	236	8.1	6.7			*
*****									



*****									
* FORMATION *					* BOREHOLE *			* QUAL. *	
*-----*									
* DEPTH *	* DIP *	* DIP *	* DEV. *	* DEV. *	* DIAM *	* DIAM *	* BFST *	* INDEX *	* * *
		AZI.		AZI.	1-3	2-4	=4		
*****									
* 5028.0			4.2	246	7.2	7.8		*	
* 5030.0			4.2	247	7.1	7.5		*	
* 5032.0			4.2	247	6.9	7.4		*	
* 5034.0			4.2	247	6.9	7.5		*	
* 5036.0			4.2	247	7.0	7.6		*	
* 5038.0			4.3	247	6.9	7.2		*	
* 5040.0			4.3	247	6.7	6.9		*	
* 5042.0	33.7	78	4.3	246	6.8	7.0	3	*	
* 5044.0	33.5	71	4.3	245	6.8	7.1	3	*	
* 5046.0	26.1	82	4.3	246	6.9	7.0	1	*	
* 5048.0	33.3	81	4.3	245	7.1	7.0	1	*	
* 5050.0	32.7	60	4.3	246	7.5	7.0	1	*	
* 5052.0	32.6	53	4.2	245	8.2	7.0	1	*	
* 5054.0	49.2	4	4.3	246	7.6	7.0	1	*	
* 5056.0	50.1	13	4.3	245	7.2	6.8	3	*	
* 5058.0	35.2	310	4.3	245	7.1	6.7	1	*	
* 5060.0	36.1	303	4.3	245	7.1	6.6	1	*	
* 5062.0	36.6	299	4.3	245	7.1	6.6	1	*	
* 5064.0			4.3	243	7.0	6.5		*	
* 5066.0	30.2	62	4.3	244	6.9	6.5	3	*	
* 5068.0	27.5	65	4.3	247	7.1	6.7	1	*	
* 5070.0			4.3	248	7.0	7.6		*	
* 5072.0	21.7	72	4.3	246	6.9	8.4	1	*	
* 5074.0	21.5	74	4.1	245	6.9	8.0	1	*	
* 5076.0	30.4	61	4.1	246	6.9	7.3	1	*	
* 5078.0	31.2	78	4.1	246	6.8	7.1	2	*	
* 5080.0	25.6	88	4.1	246	6.9	7.1	2	*	
* 5082.0	25.6	91	4.1	246	6.8	7.1	4	*	
* 5084.0	23.8	87	4.1	246	6.7	7.0	2	*	
* 5086.0	25.0	79	4.1	246	6.7	7.0	2	*	
* 5088.0	31.3	99	4.1	247	6.6	7.0	4	*	
* 5090.0	31.9	100	4.1	247	6.7	7.0	4	*	
* 5092.0	29.5	86	4.2	247	6.8	7.0	4	*	
* 5094.0	30.5	92	4.2	246	6.8	6.9	4	*	
* 5096.0	34.0	83	4.1	245	6.9	6.9	2	*	
* 5098.0			4.1	244	7.1	6.8		*	
* 5100.0			4.1	243	7.1	6.7		*	
* 5102.0			4.1	242	7.3	6.6		*	
* 5104.0			4.0	241	7.5	6.6		*	
* 5106.0	43.8	88	3.9	241	7.8	6.8	3	*	
* 5108.0			3.9	241	8.1	7.1		*	
* 5110.0			3.9	242	8.2	7.4		*	
* 5112.0			3.8	242	8.1	7.6		*	
* 5114.0			3.8	241	8.1	7.6		*	
* 5116.0			3.8	241	8.0	7.6		*	

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*          *   FORMATION   *           BOREHOLE           *   QUAL.   *
*          *-----*-----*-----*-----*-----*-----*-----*-----*
* DEPTH  *   DIP    DIP    *   DEV.   DEV.   DIAM   DIAM   * BEST   *
*          *         AZI.  *         AZI.   1-3   2-4   * =4     *
*****
* 5118.0                3.8   242    7.8    7.7    *
* 5120.0                3.9   243    7.5    7.6    *
* 5122.0                3.9   243    7.2    7.6    *
* 5124.0                4.0   244    6.9    7.6    *
* 5126.0                4.1   245    6.7    7.6    *
* 5128.0                4.1   245    6.6    7.8    *
* 5130.0                4.1   245    7.2    8.1    *
* 5132.0                4.3   245    7.6    8.3    *
* 5134.0                4.3   245    7.5    8.3    *
* 5136.0                4.3   245    7.5    7.4    *
* 5138.0                4.2   244    7.4    6.7    *
* 5140.0                4.1   244    7.3    6.6    *
* 5142.0                4.2   244    7.1    6.6    *
* 5144.0                4.3   244    7.2    7.2    *
* 5146.0                4.3   245    7.6    7.7    *
* 5148.0                4.3   245    8.1    8.0    *
* 5150.0                4.4   246    8.8    8.5    *
* 5152.0                4.4   246    9.2    8.8    *
* 5154.0                4.4   245    9.1    8.8    *
* 5156.0                4.4   245    9.0    9.0    *
* 5158.0                4.4   246    8.9    9.3    *
* 5160.0                4.4   247    8.8    9.2    *
* 5162.0                4.4   245    9.0    8.8    *
* 5164.0   16.7         52   4.4   247    9.3    8.7    3   *
* 5166.0   21.6         32   4.4   246    9.4    8.9    1   *
* 5168.0                4.4   246    9.5    9.0    *
* 5170.0   15.4         50   4.4   246    9.2    9.0    1   *
* 5172.0                4.5   246    9.0    9.0    *
* 5174.0                4.5   246    9.2    8.9    *
* 5176.0                4.5   246    9.3    8.6    *
* 5178.0                4.4   245    9.2    8.4    *
* 5180.0   59.7         62   4.4   246    9.3    8.4    1   *
* 5182.0                4.4   246    9.5    8.7    *
* 5184.0   56.8         58   4.4   245    9.6    8.8    1   *
* 5186.0                4.5   245    9.4    8.7    *
* 5188.0                4.4   244    9.0    9.0    *
* 5190.0   59.8         62   4.4   243    8.9    9.1    1   *
* 5192.0                4.4   243    8.9    8.9    *
* 5194.0                4.4   243    8.6    8.4    *
* 5196.0                4.3   243    8.2    8.1    *
* 5198.0                4.4   243    8.5    8.5    *
* 5200.0   16.3         95   4.4   243    9.1    8.8    1   *
* 5202.0                4.4   244    9.0    8.5    *
* 5204.0   13.2        123   4.5   245    8.9    8.5    1   *
* 5206.0   14.2        119   4.5   244    8.9    8.7    3   *
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*          *   FORMATION          *           BOREHOLE           *   QUAL.   *
*          *-----*-----*-----*-----*-----*-----*-----*
* DEPTH  *   DIP    DIP    *   DEV.    DEV.    DIAM    DIAM    *   BEST    *
*          *     AZI.  *     AZI.    1-3    2-4    *   =4     *
*****
* 5298.0          4.2    241    8.2    8.2          *
* 5300.0          4.2    240    8.2    8.1          *
* 5302.0          4.3    239    7.9    8.0          *
* 5304.0          4.2    241    7.6    7.9          *
* 5306.0          4.3    242    7.7    8.0          *
* 5308.0          4.3    243    7.8    8.0          *
* 5310.0          4.3    243    7.8    8.0          *
* 5312.0          4.3    243    7.6    8.1          *
* 5314.0          4.3    242    7.9    8.3          *
* 5316.0          4.3    241    7.7    7.8          *
* 5318.0          4.4    241    7.4    7.3          *
* 5320.0    42.0    86    4.4    242    7.2    7.1    1          *
* 5322.0    40.7    78    4.4    242    7.3    7.3    1          *
* 5324.0    39.5    75    4.4    241    7.6    7.7    1          *
* 5326.0    39.8    78    4.4    241    7.7    8.1    1          *
* 5328.0          4.4    241    7.9    8.5          *
* 5330.0          4.3    241    8.1    8.6          *
* 5332.0          4.3    241    7.8    8.4          *
* 5334.0    40.7    86    4.3    241    7.5    8.0    1          *
* 5336.0          4.2    240    7.2    7.8          *
* 5338.0    50.3    95    4.2    240    7.1    7.7    1          *
* 5340.0    43.4    102   4.3    240    7.2    7.8    1          *
* 5342.0    39.6    98    4.3    240    7.7    8.4    1          *
* 5344.0    46.1    89    4.3    239    8.0    8.7    3          *
* 5346.0    44.7    95    4.4    239    7.9    9.1    3          *
* 5348.0    45.8    85    4.3    239    7.9    9.4    1          *
* 5350.0          4.3    240    8.2    9.1          *
* 5352.0          4.4    239    8.0    8.9          *
* 5354.0          4.4    238    7.8    9.0          *
* 5356.0          4.4    238    7.5    8.5          *
* 5358.0          4.4    240    7.3    8.4          *
* 5360.0          4.4    241    7.4    8.8          *
* 5362.0          4.4    240    7.6    8.4          *
* 5364.0          4.4    240    7.4    7.9          *
* 5366.0          4.4    239    7.1    7.9          *
* 5368.0          4.4    238    7.5    8.4          *
* 5370.0          4.4    238    7.4    8.6          *
* 5372.0          4.4    239    7.2    8.4          *
* 5374.0          4.4    238    7.4    8.6          *
* 5376.0          4.4    236    7.8    9.0          *
* 5378.0          4.4    236    8.1    9.3          *
* 5380.0          4.3    236    7.9    9.3          *
* 5382.0          4.4    237    8.0    9.4          *
* 5384.0          4.4    237    8.0    9.3          *
* 5386.0          4.4    237    8.0    8.9          *
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* FORMATION *	* BOREHOLE *		* QUAL. *				
*-----*	*-----*		* INDEX *				
* DEPTH *	* DIP *	* DIP *	* DEV. *	* DEV. *	* DIAM *	* DIAM *	* BEST *
* *	* AZI. *	* *	* AZI. *	* *	* 1-3 *	* 2-4 *	* =4 *
* 5388.0			4.4	238	7.9	8.8	*
* 5390.0			4.4	238	7.7	8.9	*
* 5392.0			4.5	238	7.7	8.9	*
* 5394.0			4.5	239	7.6	8.9	*
* 5395.0			4.6	239	7.4	8.9	*
* 5398.0			4.7	239	7.3	8.7	*
* 5400.0			4.6	235	7.1	8.2	*
* 5402.0			4.6	237	7.1	7.8	*
* 5404.0			4.6	238	7.0	7.8	*
* 5406.0			4.5	237	7.0	7.8	*
* 5408.0			4.5	237	6.9	7.8	*
* 5410.0			4.5	238	7.0	7.8	*
* 5412.0			4.5	238	7.0	7.8	*
* 5414.0			4.6	237	7.1	7.9	*
* 5416.0			4.5	238	7.1	8.4	*
* 5418.0			4.5	238	7.3	9.0	*
* 5420.0			4.6	237	7.7	9.2	*
* 5422.0			4.5	238	7.7	9.1	*
* 5424.0			4.5	238	7.7	9.1	*
* 5426.0			4.5	239	7.6	9.1	*
* 5428.0			4.5	239	7.4	8.9	*
* 5430.0			4.5	239	7.8	8.8	*
* 5432.0			4.5	238	8.4	9.2	*
* 5434.0			4.5	239	8.6	9.1	*
* 5436.0			4.7	238	8.4	9.0	*
* 5438.0			4.7	238	8.1	9.2	*
* 5440.0			4.6	238	8.1	9.2	*
* 5442.0			4.6	237	8.0	9.0	*
* 5444.0			4.7	236	7.8	8.8	*
* 5446.0			4.6	237	7.7	8.7	*
* 5448.0			4.6	238	7.5	8.6	*
* 5450.0			4.7	238	7.2	8.2	*
* 5452.0	64.6	107	4.8	238	6.9	7.6	1 *
* 5454.0	64.8	98	4.7	238	6.9	7.6	3 *
* 5456.0			4.7	238	7.5	8.4	*
* 5458.0			4.7	237	8.0	9.1	*
* 5460.0			4.7	236	7.7	9.2	*
* 5462.0			4.8	236	7.6	8.9	*
* 5464.0			4.8	236	7.7	8.4	*
* 5466.0			4.6	236	7.4	8.5	*
* 5468.0			4.5	237	7.4	8.8	*
* 5470.0			4.5	237	7.4	9.0	*
* 5472.0			4.5	237	7.4	8.8	*
* 5474.0			4.7	238	7.5	8.3	*
* 5476.0			4.7	238	7.2	8.0	*

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* DEPTH *	* DIP *	* DIP *	* DEV. *	* DEV. *	* DIAM 1-3 *	* DIAM 2-4 *	* BEST #4 *	* GOAL. *	* INDEX *
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* 5478.0			4.7	237	6.9	7.9			*
* 5480.0	17.9	62	4.7	237	6.9	8.0	1		*
* 5482.0			4.7	238	6.8	8.2			*
* 5484.0			4.7	238	6.7	8.2			*
* 5486.0			4.7	239	6.8	8.3			*
* 5488.0	21.1	58	4.6	239	7.0	8.3	1		*
* 5490.0			4.6	239	7.0	8.2			*
* 5492.0			4.6	239	6.8	8.1			*
* 5494.0	16.9	54	4.5	239	6.7	8.3	1		*
* 5496.0			4.5	239	6.7	8.2			*
* 5498.0			4.5	240	7.0	8.5			*
* 5500.0	48.8	98	4.6	239	7.5	8.9	3		*
* 5502.0	48.2	102	4.6	237	7.7	8.9	3		*
* 5504.0			4.5	237	7.8	9.0			*
* 5506.0			4.5	239	7.8	9.1			*
* 5508.0			4.5	239	7.8	9.1			*
* 5510.0			4.5	240	7.8	9.2			*
* 5512.0			4.5	238	7.7	9.2			*
* 5514.0			4.6	237	7.5	9.1			*
* 5516.0			4.5	238	7.4	9.0			*
* 5518.0	27.0	136	4.6	238	7.5	9.1	1		*
* 5520.0	27.7	134	4.7	239	7.5	9.1	1		*
* 5522.0			4.7	239	7.6	9.2			*
* 5524.0			4.8	239	8.1	9.6			*
* 5526.0			4.9	238	8.5	9.8			*
* 5528.0			4.8	238	8.2	9.6			*
* 5530.0			4.7	238	7.8	9.2			*
* 5532.0			4.6	237	8.0	9.0			*
* 5534.0	26.1	152	4.6	237	7.7	8.7	1		*
* 5536.0			4.8	237	7.2	8.7			*
* 5538.0			4.6	237	7.2	9.4			*
* 5540.0			4.7	238	7.3	9.8			*
* 5542.0			4.7	240	7.2	9.5			*
* 5544.0			4.7	241	7.1	9.3			*
* 5546.0			4.9	240	6.9	9.4			*
* 5548.0	22.3	329	4.9	239	6.8	9.5	1		*
* 5550.0	19.7	325	4.9	239	7.2	9.9	1		*
* 5552.0			4.9	239	7.3	10.1			*
* 5554.0			4.9	237	7.4	10.1			*
* 5556.0			5.0	237	7.4	10.2			*
* 5558.0			5.0	238	7.2	10.1			*
* 5560.0			5.1	238	7.2	10.2			*
* 5562.0			5.1	237	7.2	10.3			*
* 5564.0	50.5	107	5.1	238	7.4	10.7	1		*
* 5566.0	58.4	106	5.1	239	7.6	11.0	3		*

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*          * FORMATION *          * BOREHOLE *          * QUAL. *
*          *-----*          *-----*          * INDEX *
* DEPTH *   DIP   DIP   * DEV.   DEV.   DIAM   DIAM * BEST *
*          *   AZI. *          *   AZI.   1-3   2-4 * =4 *
*****
* 5568.0  56.9   105   * 5.1   238   7.6   10.6   3 *
* 5570.0                    * 5.1   237   7.4   10.5   *
* 5572.0  46.5   120   * 5.1   237   7.4   10.3   1 *
* 5574.0                    * 4.9   237   7.7   10.1   *
* 5576.0                    * 4.9   238   7.7   10.1   *
* 5578.0                    * 5.0   238   7.6   10.3   *
* 5580.0                    * 5.0   238   7.6   10.4   *
* 5582.0                    * 5.0   237   7.4   10.3   *
* 5584.0                    * 5.1   238   7.3   10.5   *
* 5586.0                    * 5.2   238   7.4   10.7   *
* 5588.0                    * 5.1   237   7.6   10.6   *
* 5590.0                    * 5.2   237   7.3   10.5   *
* 5592.0                    * 5.3   237   7.0   10.6   *
* 5594.0                    * 5.2   238   7.2   10.5   *
* 5596.0                    * 5.2   237   7.2   10.2   *
* 5598.0                    * 5.2   238   7.0   10.0   *
* 5600.0                    * 5.1   239   7.0   10.2   *
* 5602.0                    * 5.1   239   7.0   9.9   *
* 5604.0                    * 5.0   239   7.0   9.5   *
* 5606.0                    * 5.0   238   7.3   9.9   *
* 5608.0                    * 4.9   237   7.2   9.4   *
* 5610.0                    * 4.9   237   6.9   8.5   *
* 5612.0                    * 5.1   237   6.8   9.2   *
* 5614.0  31.1   134   * 5.2   238   7.0   9.6   3 *
* 5616.0  32.9   130   * 5.0   237   7.1   8.6   1 *
* 5618.0                    * 4.9   236   7.1   7.9   *
* 5620.0                    * 4.7   237   6.8   7.8   *
* 5622.0                    * 4.8   237   6.7   7.8   *
* 5624.0                    * 4.9   237   6.7   7.8   *
* 5626.0                    * 4.8   237   6.7   8.0   *
* 5628.0                    * 4.8   237   7.0   9.0   *
* 5630.0                    * 5.0   236   7.7   10.0   *
* 5632.0                    * 5.1   237   8.0   10.7   *
* 5634.0                    * 5.1   237   8.0   11.0   *
* 5636.0                    * 5.1   237   8.3   10.9   *
* 5638.0                    * 5.2   237   8.4   10.7   *
* 5640.0                    * 5.2   237   8.0   10.5   *
* 5642.0                    * 5.1   236   7.7   10.5   *
* 5644.0                    * 5.1   236   7.3   10.6   *
* 5646.0                    * 5.1   236   7.5   10.6   *
* 5648.0                    * 5.2   236   8.1   10.7   *
* 5650.0                    * 5.2   235   8.2   11.1   *
* 5652.0                    * 5.2   234   7.8   11.3   *
* 5654.0                    * 5.1   234   7.2   10.8   *
* 5656.0                    * 5.1   235   7.5   10.4   *
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*          * FORMATION *          BOREHOLE *          * QUAL. *
*          *-----*          *-----*          * INDEX *
* DEPTH *  DIP   DIP   *  DEV.   DEV.   DIAM   DIAM * BEST *
*          *     AZI. *          *     AZI.   1-3   2-4 * =4 *
*****
* 5658.0          5.1   236   7.9   10.7          *
* 5660.0          5.1   235   8.0   10.9          *
* 5662.0          5.1   236   8.1   11.0          *
* 5664.0          5.1   237   7.6   11.1          *
* 5666.0          5.2   237   6.9   10.9          *
* 5668.0          5.2   237   6.7   10.5          *
* 5670.0          5.1   236   6.9   10.3          *
* 5672.0          5.1   236   7.0   10.2          *
* 5674.0          5.1   236   7.1   10.2          *
* 5676.0          5.1   236   7.1   10.2          *
* 5678.0          5.1   235   7.0   10.3          *
* 5680.0          5.1   236   7.0   10.3          *
* 5682.0          5.1   235   7.0   10.3          *
* 5684.0          5.1   235   6.9   10.2          *
* 5686.0          5.1   235   6.7   10.0          *
* 5688.0          5.1   236   6.5   9.7          *
* 5690.0          5.1   235   6.5   9.3          *
* 5692.0          5.1   236   6.6   9.1          *
* 5694.0          5.0   236   6.7   9.4          *
* 5696.0          4.8   236   6.7   9.6          *
* 5698.0  28.1    93   4.9   236   6.7   9.5   3 *
* 5700.0  22.6   114   4.9   236   7.0   9.6   3 *
* 5702.0  20.6   119   4.9   236   7.1   9.7   1 *
* 5704.0  29.7   109   4.8   234   7.1   9.8   3 *
* 5706.0  32.2    87   4.7   233   7.2   9.3   1 *
* 5708.0          4.7   235   7.3   9.9          *
* 5710.0          4.7   235   7.5   9.8          *
* 5712.0          4.7   234   7.8   9.9          *
* 5714.0  25.4   115   4.7   235   7.9   10.1  3 *
* 5716.0  24.5   115   4.7   236   8.0   10.1  3 *
* 5718.0          4.8   234   8.1   10.1          *
* 5720.0          4.8   232   8.3   10.0          *
* 5722.0          4.9   232   8.7   9.7          *
* 5724.0          4.9   235   8.8   9.6          *
* 5726.0          4.9   234   8.2   9.4          *
* 5728.0          4.8   234   8.2   9.5          *
* 5730.0          4.8   234   8.3   9.6          *
* 5732.0          4.8   234   8.2   9.4          *
* 5734.0          4.9   234   8.6   9.3          *
* 5736.0          4.9   234   8.6   8.9          *
* 5738.0  27.0   127   4.8   235   7.8   8.4   1 *
* 5740.0  27.8   130   4.8   237   7.4   8.2   1 *
* 5742.0          4.8   236   7.4   8.5          *
* 5744.0          4.9   235   7.6   8.8          *
* 5746.0          4.9   235   8.0   8.7          *
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FORMATION			BOREHOLE				QUAL.	INDEX
DEPTH	DIP	DIP	DEV.	DEV.	DIAM	DIAM	BEST	
		AZI.		AZI.	1-3	2-4	=4	
* 5748.0	27.3	101	4.0	235	8.5	8.7	1	
* 5750.0	24.1	122	4.9	235	8.5	8.3	3	
* 5752.0	29.8	120	4.9	233	8.4	7.7	1	
* 5754.0	31.9	141	4.9	232	8.6	7.5	1	
* 5756.0	23.5	112	5.0	231	8.2	7.2	3	
* 5758.0	23.5	111	5.0	231	7.9	7.0	3	
* 5760.0	22.1	117	5.0	232	7.5	6.7	1	
* 5762.0			4.9	231	7.2	6.5		
* 5764.0			4.9	233	7.1	6.5		
* 5766.0			4.9	237	7.1	6.6		
* 5768.0	49.8	239	4.8	237	7.2	6.7	3	
* 5770.0	50.2	242	4.8	238	7.2	6.8	3	
* 5772.0	47.8	245	4.7	239	7.3	6.9	1	
* 5774.0			4.8	238	7.6	7.1		
* 5776.0			4.8	236	8.2	7.3		
* 5778.0			4.7	236	8.5	7.7		
* 5780.0			4.7	236	8.5	7.9		
* 5782.0			4.7	236	8.9	7.9		
* 5784.0			4.8	235	9.2	7.9		
* 5786.0			4.8	236	9.2	7.8		
* 5788.0			4.8	238	9.2	7.6		
* 5790.0	19.3	138	4.8	237	9.6	7.7	1	
* 5792.0	22.6	144	4.8	237	10.0	7.9	1	
* 5794.0	19.6	154	4.8	237	10.0	8.0	1	
* 5796.0			4.8	236	9.9	8.2		
* 5798.0	25.5	139	4.8	237	9.8	8.3	3	
* 5800.0	27.7	138	4.8	238	10.1	8.4	3	
* 5802.0	23.3	123	5.0	238	10.5	8.4	1	
* 5804.0	28.4	134	5.0	237	10.6	8.1	1	
* 5806.0	21.7	148	5.0	237	10.2	7.9	1	
* 5808.0			5.0	238	10.2	8.1		
* 5810.0	38.4	114	5.0	238	10.3	8.1	1	
* 5812.0	37.5	108	5.1	237	9.8	7.8	1	
* 5814.0	35.5	111	5.1	235	9.2	7.6	1	
* 5816.0	33.0	113	5.1	235	8.8	7.2	3	
* 5818.0	23.4	52	5.1	235	9.2	7.5	1	
* 5820.0	22.6	61	5.0	235	9.9	7.6	1	
* 5822.0			5.1	236	10.3	7.9		
* 5824.0			5.1	235	10.2	8.3		
* 5826.0			5.1	235	9.9	8.0		
* 5828.0	15.9	43	5.0	236	9.3	7.4	1	
* 5830.0			5.0	237	8.9	7.0		
* 5832.0			4.9	238	8.6	7.0		
* 5834.0			5.0	238	8.4	6.9		
* 5836.0			5.0	238	8.0	6.8		

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* FORMATION *		* BOREHOLE *				* QUAL. *	* INDEX *
* DEPTH *	* DIP *	* DIP *	* DEV. *	* DEV. *	* DIAM. 1-3 *	* DIAM. 2-4 *	* BEST =4 *
* AZI. *		* AZI. *					
* 5838.0			4.9	237	7.6	6.7	*
* 5840.0			5.0	237	7.4	6.6	*
* 5842.0			4.9	236	7.3	6.5	*
* 5844.0			4.9	237	7.2	6.4	*
* 5846.0			4.9	238	7.4	6.5	*
* 5848.0			4.9	239	7.7	6.7	*
* 5850.0			4.8	238	7.7	6.7	*
* 5852.0			4.7	238	7.8	6.8	*
* 5854.0			4.7	240	7.8	6.8	*
* 5856.0			4.8	241	7.9	6.8	*
* 5858.0	66.9	95	4.8	241	8.8	7.3	1 *
* 5860.0	22.5	135	4.8	241	9.7	8.1	1 *
* 5862.0			4.7	242	9.6	8.6	*
* 5864.0			4.8	243	9.4	8.8	*
* 5866.0	27.8	132	4.8	243	9.3	8.7	3 *
* 5868.0	27.8	135	4.7	245	9.2	8.5	1 *
* 5870.0			4.6	246	9.4	8.8	*
* 5872.0			4.7	244	9.6	8.9	*
* 5874.0	35.2	132	4.8	244	9.8	8.9	1 *
* 5876.0			4.9	245	9.8	8.9	*
* 5878.0			4.8	245	9.4	8.9	*
* 5880.0	53.0	117	4.7	246	9.1	8.8	1 *
* 5882.0	55.9	119	4.9	246	8.9	9.1	3 *
* 5884.0	10.5	153	5.0	246	8.5	9.3	1 *
* 5886.0	12.5	150	4.9	247	8.4	8.9	1 *
* 5888.0	57.5	123	5.0	247	8.4	9.0	1 *
* 5890.0			5.1	246	8.8	9.2	*
* 5892.0			5.0	247	9.1	9.4	*
* 5894.0			5.0	249	8.6	9.3	*
* 5896.0			5.1	249	8.2	9.0	*
* 5898.0			5.0	249	8.2	8.8	*
* 5900.0			4.9	249	8.1	8.9	*
* 5902.0			4.9	250	8.0	8.7	*
* 5904.0			4.9	252	7.9	8.5	*
* 5906.0			4.9	251	8.1	8.7	*
* 5908.0			4.9	251	8.3	8.9	*
* 5910.0			4.9	252	8.4	9.0	*
* 5912.0			4.9	251	8.2	8.5	*
* 5914.0			4.8	251	7.9	7.8	*
* 5916.0			4.8	251	7.8	7.6	*
* 5918.0			4.9	252	7.4	7.4	*
* 5920.0			4.9	250	7.2	7.2	*
* 5922.0			4.8	250	7.2	7.2	*
* 5924.0			4.8	251	7.4	7.4	*
* 5926.0			4.8	251	7.4	7.3	*

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*          * FORMATION *          * BOREHOLE *          * QUAL. *
*          *-----*          *-----*          * INDEX *
* DEPTH *  DIP  *  DIP  *  DEV.  *  DEV.  *  DIAM  *  DIAM  *  BEST  *
*          *    *  *  *    *  *    *  *  *  *  *  *  *  *  *
*          *  AZI. *  *  AZI.  *  *  *  *  *  *  *  *  *  *  *
*****
# 5928.0          * 4.8  * 251  * 7.4  * 7.2  *          *
# 5930.0          * 4.8  * 252  * 7.5  * 7.5  *          *
# 5932.0          * 4.8  * 251  * 7.6  * 7.7  *          *
# 5934.0          * 4.8  * 251  * 7.7  * 7.9  *          *
# 5936.0          * 4.8  * 251  * 7.8  * 8.0  *          *
# 5938.0          * 4.8  * 252  * 7.9  * 8.1  *          *
# 5940.0          * 4.8  * 251  * 7.9  * 7.8  *          *
# 5942.0          * 4.8  * 258  * 7.7  * 6.9  *          *
# 5944.0          * 4.7  * 260  * 7.6  * 6.5  *          *
# 5946.0          * 4.7  * 259  * 7.6  * 6.6  *          *
# 5948.0          * 4.7  * 258  * 7.9  * 6.8  *          *
# 5950.0          * 4.7  * 258  * 7.9  * 6.8  *          *
# 5952.0          * 4.7  * 258  * 7.8  * 6.7  *          *
# 5954.0  29.4    * 127  * 4.9  * 256  * 7.8  * 7.3  * 1  *
# 5956.0  33.3    * 125  * 5.0  * 255  * 8.1  * 8.2  * 3  *
# 5958.0          * 5.1  * 255  * 8.5  * 8.7  *          *
# 5960.0  23.5    * 115  * 5.1  * 255  * 8.4  * 8.7  * 1  *
# 5962.0          * 5.1  * 254  * 8.5  * 8.7  *          *
# 5964.0          * 5.1  * 254  * 8.7  * 8.8  *          *
# 5966.0  25.3    * 92   * 5.2  * 255  * 8.7  * 8.6  * 1  *
# 5968.0          * 5.2  * 255  * 8.7  * 8.4  *          *
# 5970.0          * 5.2  * 254  * 8.8  * 8.2  *          *
# 5972.0  21.7    * 117  * 5.2  * 254  * 9.2  * 8.2  * 3  *
# 5974.0  19.9    * 108  * 5.2  * 254  * 9.8  * 8.3  * 3  *
# 5976.0          * 5.2  * 255  * 10.5 * 8.2  *          *
# 5978.0          * 5.2  * 254  * 10.5 * 8.0  *          *
# 5980.0          * 5.2  * 254  * 10.1 * 8.1  *          *
# 5982.0          * 5.2  * 254  * 10.0 * 8.2  *          *
# 5984.0          * 5.3  * 255  * 10.3 * 7.5  *          *
# 5986.0          * 5.3  * 255  * 10.6 * 7.1  *          *
# 5988.0          * 5.3  * 255  * 10.5 * 7.1  *          *
# 5990.0          * 5.3  * 255  * 10.3 * 6.9  *          *
# 5992.0          * 5.3  * 254  * 10.3 * 6.3  *          *
# 5994.0          * 5.4  * 254  * 10.7 * 6.7  *          *
# 5996.0          * 5.5  * 254  * 11.0 * 7.8  *          *
# 5998.0          * 5.5  * 254  * 11.1 * 8.2  *          *
# 6000.0          * 5.5  * 254  * 11.2 * 8.3  *          *
# 6002.0          * 5.5  * 254  * 11.3 * 8.5  *          *
# 6004.0          * 5.6  * 255  * 11.4 * 8.6  *          *
# 6006.0          * 5.7  * 254  * 11.6 * 8.4  *          *
# 6008.0          * 5.7  * 253  * 11.7 * 8.2  *          *
# 6010.0          * 5.7  * 255  * 11.8 * 8.2  *          *
# 6012.0          * 5.7  * 256  * 11.6 * 8.0  *          *
# 6014.0          * 5.7  * 256  * 11.3 * 8.0  *          *
# 6016.0          * 5.7  * 254  * 11.2 * 8.0  *          *
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* FORMATION *	* BOREHOLE *		* QUAL. *				
* ----- *	* INDEX *		* BEST *				
* DEPTH *	DIP	DIP	DEV.	DEV.	DIAM	DIAM	* BEST *
* * *	AZI.	AZI.	1-3	2-4	* =4 *	* =4 *	* =4 *
* 6382.0			6.0	271	13.3	13.1	*
* 6384.0			6.0	271	13.3	13.0	*
* 6386.0			6.0	272	13.1	13.0	*
* 6388.0			6.0	272	13.0	12.9	*
* 6390.0			6.1	271	12.9	12.8	*
* 6392.0			6.2	271	12.8	12.7	*
* 6394.0			6.4	272	12.9	12.5	*
* 6396.0			6.5	272	13.0	12.5	*
* 6398.0			6.5	272	13.1	12.9	*
* 6400.0			6.5	273	13.3	13.1	*
* 6402.0			6.5	274	13.3	13.0	*
* 6404.0			6.5	275	13.2	12.9	*
* 6406.0			6.5	275	13.1	13.0	*
* 6408.0			6.5	275	13.0	13.2	*
* 6410.0			6.4	275	13.0	13.4	*
* 6412.0			6.4	275	13.2	13.6	*
* 6414.0			6.4	275	13.4	13.6	*
* 6416.0			6.4	275	13.5	13.6	*
* 6418.0			6.4	275	13.7	13.7	*
* 6420.0	64.1	169	6.4	275	13.8	13.8	1 *
* 6422.0			6.3	275	13.9	14.1	*
* 6424.0			6.5	274	14.0	14.2	*
* 6426.0			7.2	273	13.0	12.8	*
* 6428.0			7.8	270	9.9	9.5	*
* 6430.0			7.9	272	8.5	7.9	*
* 6432.0			7.8	275	9.3	8.6	*
* 6434.0			7.8	274	10.5	9.8	*
* 6436.0			7.7	273	11.2	10.0	*
* 6438.0			7.7	272	10.4	9.5	*
* 6440.0			7.5	272	9.3	8.9	*
* 6442.0	6.8	322	7.1	271	8.9	8.4	1 *
* 6444.0	5.2	10	7.1	271	9.2	8.0	3 *
* 6446.0	4.3	358	7.0	270	9.2	7.8	1 *
* 6448.0	2.6	341	6.9	270	9.1	7.6	1 *
* 6450.0			6.9	272	9.0	7.5	*
* 6452.0			6.8	271	8.9	7.5	*
* 6454.0	4.0	327	6.8	270	8.9	7.5	1 *
* 6456.0	3.8	320	6.8	271	9.0	7.6	1 *
* 6458.0	2.7	183	6.7	272	9.0	7.6	1 *
* 6460.0	2.1	105	6.7	271	8.9	7.6	3 *
* 6462.0	1.4	41	6.6	270	8.9	7.6	4 *
* 6464.0	4.4	32	6.6	269	8.9	7.6	4 *
* 6466.0	3.2	59	6.6	270	9.0	7.6	4 *
* 6468.0	1.8	50	6.6	271	9.1	7.6	4 *
* 6470.0	1.1	138	6.5	270	9.1	7.6	4 *

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* FORMATION *	* BOREHOLE *		* QUAL. *				
*-----*	*-----*		* INDEX *				
* DEPTH *	* DIP *	* DIP *	* DEV. *	* DEV. *	* DIAM *	* DIAM *	* BEST *
* *	* AZI. *	* *	* AZI. *	* *	* 1-3 *	* 2-4 *	* =4 *
* 6472.0	2.2	115	6.6	270	9.2	7.7	4 *
* 6474.0	2.5	153	6.6	271	9.3	7.8	4 *
* 6476.0	7.3	167	6.5	271	9.3	7.8	4 *
* 6478.0	8.6	165	6.5	271	9.4	7.9	4 *
* 6480.0	6.1	191	6.5	271	9.4	8.0	2 *
* 6482.0			6.5	270	9.3	8.0	4 *
* 6484.0			6.5	270	9.4	7.9	4 *
* 6486.0	4.2	42	6.5	272	9.5	7.9	4 *
* 6488.0	5.4	60	6.5	271	9.4	7.8	4 *
* 6490.0	5.8	82	6.5	270	9.4	7.8	4 *
* 6492.0	5.1	85	6.5	271	9.5	7.7	4 *
* 6494.0	2.2	35	6.5	271	9.5	7.7	4 *
* 6496.0	0.8	107	6.5	270	9.5	7.7	4 *
* 6498.0	5.1	229	6.4	269	9.3	7.7	2 *
* 6500.0	5.8	229	6.4	269	9.3	7.6	2 *
* 6502.0			6.5	269	9.3	7.5	4 *
* 6504.0	4.1	4	6.5	270	9.4	7.4	2 *
* 6506.0			6.3	270	9.4	7.4	4 *
* 6508.0	4.4	313	6.3	270	9.8	7.4	2 *
* 6510.0	6.1	87	6.4	270	9.7	7.3	4 *
* 6512.0	7.2	82	6.4	270	9.4	7.3	4 *
* 6514.0	7.4	52	6.4	271	9.3	7.4	3 *
* 6516.0	8.7	51	6.3	271	9.2	7.3	1 *
* 6518.0	9.4	90	6.2	270	9.4	7.4	1 *
* 6520.0			6.2	270	9.8	7.4	4 *
* 6522.0			6.3	270	10.1	7.3	4 *
* 6524.0	18.7	323	6.3	270	10.0	7.3	1 *
* 6526.0	7.5	14	6.3	271	9.7	7.3	1 *
* 6528.0	9.1	37	6.2	272	9.7	7.4	1 *
* 6530.0	20.6	335	6.1	271	9.6	7.4	1 *
* 6532.0	12.4	56	6.2	270	9.1	7.3	1 *
* 6534.0	4.8	302	6.2	270	9.2	7.2	4 *
* 6536.0	3.7	291	6.3	270	9.4	7.3	4 *
* 6538.0	2.8	289	6.2	269	9.5	7.3	4 *
* 6540.0	2.8	286	6.2	268	9.6	7.0	2 *
* 6542.0			6.2	269	9.8	6.7	4 *
* 6544.0	15.0	295	6.2	270	9.7	6.8	1 *
* 6546.0	9.6	270	6.1	270	9.5	6.8	1 *
* 6548.0	8.7	283	6.1	270	9.5	6.8	1 *
* 6550.0	3.6	281	6.1	269	9.5	6.9	1 *
* 6552.0	4.8	283	6.0	269	9.4	7.1	4 *
* 6554.0	5.7	267	6.0	270	9.4	7.2	2 *
* 6556.0	2.6	229	6.1	271	9.4	7.2	2 *
* 6558.0	3.6	249	6.1	270	9.3	7.2	2 *
* 6560.0	4.5	269	6.1	269	9.2	7.2	4 *

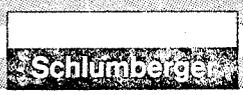
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FORMATION			BOREHOLE				QUAL.	INDEX
DEPTH	DIP	DIP	DEV.	DEV.	DIAM	DIAM	BEST	
		AZI.		AZI.	1-3	2-4	=4	

* 6562.0	6.3	272	6.0	270	9.2	7.2	2	*
* 6564.0	2.9	267	6.0	270	9.1	7.3	4	*
* 6566.0	5.9	264	6.0	269	9.1	7.3	4	*
* 6568.0	5.6	272	6.0	268	9.6	7.3	4	*
* 6570.0	7.6	275	6.0	268	9.9	7.2	2	*
* 6572.0	7.2	275	5.9	269	10.0	7.2	2	*
* 6574.0	4.9	283	5.9	270	10.1	7.2	4	*
* 6576.0	3.8	288	5.9	270	10.1	7.3	4	*
* 6578.0	4.6	285	5.6	270	10.0	7.3	4	*
* 6580.0	5.8	269	5.8	271	9.9	7.4	4	*
* 6582.0	8.1	270	5.9	270	9.7	7.5	4	*
* 6584.0	6.7	279	5.9	269	9.5	7.5	4	*
* 6586.0	5.2	291	5.9	269	10.2	7.2	4	*
* 6588.0	2.7	315	5.9	268	11.0	6.8	4	*
* 6590.0	10.0	316	5.9	267	11.1	6.9	1	*
* 6592.0	9.4	315	5.9	267	11.2	7.2	1	*
* 6594.0	8.0	332	5.9	267	10.7	7.2	1	*
* 6596.0	10.4	302	5.8	267	10.0	7.3	3	*
* 6598.0	9.9	299	5.8	267	9.3	7.5	3	*
* 6600.0	7.5	298	5.8	267	8.8	7.5	1	*
* 6602.0			5.7	266	8.8	7.4		*
* 6604.0			5.7	264	8.9	7.3		*
* 6606.0			5.8	264	8.9	7.3		*
* 6608.0			5.8	265	8.8	7.3		*
* 6610.0			5.8	266	8.8	7.2		*
* 6612.0	2.8	318	5.7	266	8.8	7.2	1	*
* 6614.0	12.4	217	5.6	265	8.7	7.2	3	*
* 6616.0	2.7	218	5.5	265	8.6	7.2	3	*
* 6618.0	2.1	295	5.5	266	8.7	7.1	3	*
* 6620.0	3.9	321	5.4	265	8.7	6.9	3	*
* 6622.0	4.7	269	5.3	264	8.7	6.9	1	*
* 6624.0			5.4	265	8.8	7.1		*
* 6626.0			5.4	264	8.9	7.1		*
* 6628.0	3.4	314	5.3	264	8.8	7.2	1	*
* 6630.0	2.3	287	5.3	264	8.7	7.3	4	*
* 6632.0	2.7	286	5.3	265	8.9	7.4	4	*
* 6634.0	3.3	279	5.3	265	9.1	7.5	2	*
* 6636.0	2.2	309	5.2	264	9.2	7.5	4	*
* 6638.0	1.4	11	5.2	264	9.2	7.5	4	*
* 6640.0	2.2	331	5.2	264	9.2	7.5	4	*
* 6642.0	6.2	146	5.2	264	9.1	7.5	4	*
* 6644.0	7.6	144	5.2	263	9.0	7.5	2	*
* 6646.0	9.7	234	5.2	263	9.4	7.5	4	*
* 6648.0	8.0	221	5.2	264	9.6	7.5	4	*
* 6650.0	6.6	230	5.2	264	9.1	7.5	4	*

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* DEPTH	* DIP	* DIP	* AZI.	* DEV.	* DEV.	* DIAM	* DIAM	* QUAL.	* INDEX
						1-3	2-4	=4	BEST
* 6652.0	9.4	254		5.2	263	8.7	7.6	4	*
* 6654.0	8.4	259		5.2	263	8.8	7.6	4	*
* 6656.0	6.3	269		5.2	263	8.8	7.6	4	*
* 6658.0	6.3	260		5.2	263	8.9	7.5	2	*
* 6660.0	5.4	253		5.2	264	8.9	7.5	2	*
* 6662.0	5.0	266		5.2	264	8.9	7.5	4	*
* 6664.0	1.8	234		5.2	263	9.0	7.5	4	*
* 6666.0	1.7	209		5.1	262	9.1	7.4	4	*
* 6668.0	4.0	134		5.1	262	9.2	7.4	4	*
* 6670.0	5.5	123		5.1	262	9.3	7.4	4	*
* 6672.0	7.1	271		5.0	262	9.3	7.3	2	*
* 6674.0	7.1	240		5.0	263	9.3	7.4	4	*
* 6676.0	5.6	228		5.1	263	9.1	7.4	4	*
* 6678.0	11.4	252		5.1	263	9.1	7.4	2	*
* 6680.0	8.1	230		5.0	262	9.1	7.4	2	*
* 6682.0	2.8	98		5.1	262	9.1	7.4	2	*
* 6684.0	1.6	184		5.1	262	9.3	7.4	4	*
* 6686.0	1.5	129		5.1	262	9.3	7.4	4	*
* 6688.0	2.0	113		5.1	262	9.5	7.3	4	*
* 6690.0	1.5	87		5.1	262	9.8	7.3	4	*
* 6692.0	1.8	125		5.0	262	10.0	7.3	4	*
* 6694.0	0.8	203		4.9	262	10.1	7.3	4	*
* 6696.0				4.9	262	10.2	7.3		*
* 6698.0				4.9	262	10.3	7.4		*
* 6700.0	1.1	255		4.8	263	10.3	7.4	4	*
* 6702.0	1.6	18		4.9	263	10.0	7.4	4	*
* 6704.0	2.4	11		5.0	262	9.6	7.4	4	*
* 6706.0	3.9	266		5.0	261	9.2	7.3	4	*
* 6708.0	2.7	288		5.1	261	8.9	7.3	4	*
* 6710.0	5.0	211		5.1	261	8.8	7.3	1	*
* 6712.0	1.4	214		5.0	260	9.2	7.4	3	*
* 6714.0	3.6	34		5.1	260	9.6	7.4	1	*
* 6716.0	1.9	42		5.1	261	9.3	7.2	3	*
* 6718.0	1.6	256		5.0	261	8.7	7.0	4	*
* 6720.0	1.8	256		5.0	261	8.4	7.0	4	*
* 6722.0	4.1	287		4.9	261	8.4	7.0	4	*
* 6724.0	3.7	298		4.8	260	8.5	7.0	4	*
* 6726.0	3.6	296		4.8	261	8.7	7.1	4	*
* 6728.0	3.1	283		4.7	261	8.8	7.2	4	*
* 6730.0	2.7	285		4.8	260	9.2	7.3	4	*
* 6732.0	2.5	295		4.7	260	9.7	7.2	4	*
* 6734.0	2.5	314		4.6	289	9.9	7.2	4	*
* 6736.0	5.7	295		4.6	260	9.9	7.2	1	*
* 6738.0	9.0	312		4.5	260	9.6	7.3	3	*
* 6740.0	8.8	336		4.5	258	8.9	7.4	3	*

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* FORMATION *	* BOREHOLE *		* QUAL. *				
* ----- * INDEX *	* DEPTH *	* DIP *	* DEV. *	DEVI.	DIAM	DIAM	* BEST *
* AZI. *	* AZI. *	1-3	2-4	* =4 *			
* 6742.0	2.9	35	4.6	257	8.5	7.4	1 *
* 6744.0	2.1	16	4.6	258	8.5	7.5	1 *
* 6746.0	8.8	297	4.7	259	8.8	7.6	1 *
* 6748.0	14.5	193	4.8	259	9.1	7.7	3 *
* 6750.0	18.8	194	4.8	258	8.8	7.6	3 *
* 6752.0			4.8	257	8.5	7.6	1 *
* 6754.0	5.3	242	4.7	258	8.6	7.6	1 *
* 6756.0			4.6	259	8.8	7.5	1 *
* 6758.0	5.3	282	4.5	258	8.9	7.5	2 *
* 6760.0	4.0	286	4.5	258	9.1	7.4	4 *
* 6762.0	4.1	308	4.4	258	9.4	7.4	4 *
* 6764.0	3.7	315	4.4	258	9.4	7.4	4 *
* 6766.0	3.3	284	4.4	258	9.3	7.3	4 *
* 6768.0	2.5	292	4.4	257	9.3	7.2	2 *
* 6770.0	2.6	289	4.4	256	9.1	7.2	4 *
* 6772.0	2.1	260	4.4	256	8.8	7.2	4 *
* 6774.0	1.6	279	4.4	257	8.6	7.2	4 *
* 6776.0	1.6	262	4.5	258	8.7	7.2	4 *
* 6778.0	2.6	250	4.5	259	8.9	7.2	4 *
* 6780.0	2.2	261	4.5	258	9.0	7.2	2 *
* 6782.0	2.6	285	4.4	259	8.9	7.1	4 *
* 6784.0	2.2	266	4.4	258	8.9	7.1	2 *
* 6786.0	1.5	233	4.4	256	8.9	7.2	2 *
* 6788.0	1.5	258	4.4	256	8.9	7.1	4 *
* 6790.0	1.7	279	4.4	256	9.1	7.0	4 *
* 6792.0	2.5	272	4.3	255	9.2	7.1	4 *
* 6794.0	2.3	260	4.3	255	9.3	7.2	4 *
* 6796.0	1.4	256	4.3	255	9.5	7.2	4 *
* 6798.0	2.6	257	4.2	256	9.7	7.2	4 *
* 6800.0	2.2	243	4.2	256	9.8	7.2	4 *
* 6802.0	3.5	247	4.2	256	9.7	7.2	4 *
* 6804.0	2.3	276	4.2	256	9.5	7.3	4 *
* 6806.0	2.5	276	4.2	255	9.4	7.4	3 *
* 6808.0	3.4	257	4.2	255	9.5	7.4	3 *
* 6810.0	3.9	277	4.1	255	9.6	7.6	3 *
* 6812.0	4.2	268	4.2	255	9.7	7.7	3 *
* 6814.0			4.3	256	9.9	7.6	1 *
* 6816.0	5.6	305	4.2	255	10.3	7.6	1 *
* 6818.0	6.6	241	4.1	254	11.2	7.8	1 *
* 6820.0			4.0	254	11.5	8.0	1 *
* 6822.0	8.9	221	3.9	254	11.5	7.9	1 *
* 6824.0	7.7	234	4.0	253	11.3	7.6	1 *
* 6826.0	7.5	244	4.0	252	10.8	7.4	4 *
* 6828.0	5.9	245	4.0	252	10.8	7.2	4 *
* 6830.0	6.0	229	3.9	251	11.1	7.3	4 *

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*          * FORMATION *          BOREHOLE *          * QUAL. *
*          *-----*          *-----*          * INDEX *
* DEPTH *  DIP   DIP   *  DEV.  DEV.  DIAM  DIAM * BEST *
*          *      AZI. *          *      AZI.  * 1-3  2-4 * =4 *
*****
* 6832.0  5.7   249   4.0   251   10.8  7.3   4 *
* 6834.0  5.3   247   4.0   252   11.1  7.1   4 *
* 6836.0           4.0   252   11.5  7.1   *
* 6838.0           4.1   252   11.8  7.3   *
* 6840.0           4.1   253   11.9  7.4   *
* 6842.0           4.0   252   11.9  7.5   *
* 6844.0           3.9   251   11.8  7.6   *
* 6846.0           3.9   252   11.6  7.3   *
* 6848.0           3.9   253   11.6  7.2   *
* 6850.0           4.0   253   11.3  7.3   *
* 6852.0  2.8   221   4.0   253   11.1  7.2   1 *
* 6854.0           4.1   253   11.1  7.1   *
* 6856.0           4.2   252   11.1  7.1   *
* 6858.0           4.1   251   11.0  7.6   *
* 6860.0  3.3   263   4.0   250   10.8  8.2   1 *
* 6862.0  4.0   336   4.1   250   10.9  7.9   1 *
* 6864.0  5.2   347   4.1   250   11.1  7.5   1 *
* 6866.0  3.8   275   4.1   250   11.1  7.5   4 *
* 6868.0  6.3   262   4.0   250   10.7  7.6   4 *
* 6870.0  6.3   265   4.0   249   10.0  7.6   4 *
* 6872.0  6.6   265   3.9   250   9.4   7.6   4 *
* 6874.0  6.6   267   3.8   251   9.1   7.7   3 *
* 6876.0 10.8   260   3.7   249   8.8   7.6   1 *
* 6878.0           3.6   248   9.5   7.2   *
* 6880.0           3.7   250   10.3  7.0   *
* 6882.0           3.6   249   10.3  6.9   *
* 6884.0           3.6   250   10.4  6.8   *
* 6886.0           3.6   250   10.5  6.8   *
* 6888.0  8.1   287   3.6   249   10.1  7.0   3 *
* 6890.0  9.1   278   3.6   248   9.5   7.1   3 *
* 6892.0  5.6   265   3.6   247   9.4   7.1   3 *
* 6894.0  5.1   258   3.6   247   9.4   7.1   3 *
* 6896.0  9.6   268   3.6   247   9.3   7.1   3 *
* 6898.0 11.4   272   3.6   247   9.0   7.2   4 *
* 6900.0 11.0   252   3.6   247   8.7   7.4   4 *
* 6902.0           3.6   246   8.5   7.4   *
* 6904.0 10.3   280   3.6   246   8.4   7.5   4 *
* 6906.0  8.3   283   3.6   246   8.3   7.5   4 *
* 6908.0  1.8   254   3.5   246   8.2   7.5   4 *
* 6910.0  3.8   304   3.4   245   8.4   7.6   4 *
* 6912.0 17.6   295   3.4   244   8.6   7.5   2 *
* 6914.0 13.0   277   3.3   244   8.9   7.5   4 *
* 6916.0  7.6   300   3.3   245   8.8   7.7   4 *
* 6918.0  8.3   308   3.2   246   8.2   7.6   4 *
* 6920.0  3.2   227   3.0   246   8.1   7.5   2 *
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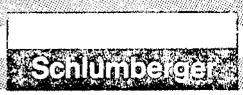
* DEPTH	* DIP	* DIP	* DEV.	* DEV.	* DIAM	* DIAM	* QUAL.	* INDEX
* #	* #	* AZI.	* #	* AZI.	* 1-3	* 2-4	* #d	* #
* 6922.0	10.7	356	3.0	245	8.6	7.4	2	*
* 6924.0	4.5	326	3.0	245	9.1	7.4	2	*
* 6926.0	4.4	273	3.0	244	9.3	7.3	2	*
* 6928.0			3.1	244	9.1	7.3		*
* 6930.0			3.1	242	8.9	7.5		*
* 6932.0	8.5	275	3.0	239	8.3	7.5	4	*
* 6934.0	10.1	267	3.0	238	7.6	7.6	4	*
* 6936.0			2.9	241	7.3	7.8		*
* 6938.0			2.8	243	7.0	8.1		*
* 6940.0			2.9	242	5.8	8.1		*
* 6942.0	19.2	255	2.9	242	6.9	8.1	1	*
* 6944.0	3.9	257	2.9	241	7.0	8.0	1	*
* 6946.0	4.5	242	2.8	242	6.9	8.0	3	*
* 6948.0	4.4	248	2.8	241	6.9	8.0	3	*
* 6950.0	4.4	245	2.7	241	7.0	8.0	3	*
* 6952.0			2.7	241	7.1	8.1		*
* 6954.0	5.8	242	2.6	240	7.0	8.4	1	*
* 6956.0	4.1	242	2.6	239	7.1	8.5	1	*
* 6958.0	2.9	235	2.6	240	7.2	8.3	1	*
* 6960.0	7.8	3	2.6	240	7.2	8.2	1	*
* 6962.0			2.7	238	7.2	8.1		*
* 6964.0			2.6	239	7.3	8.1		*
* 6966.0			2.5	239	7.4	8.7		*
* 6968.0	4.1	215	2.4	240	7.7	9.4	1	*
* 6970.0			2.4	239	7.8	9.2		*
* 6972.0			2.5	236	7.5	8.7		*
* 6974.0	4.0	293	2.5	236	7.4	8.3	3	*
* 6976.0	2.6	279	2.5	237	7.4	8.2	3	*
* 6978.0	13.9	291	2.5	237	7.5	8.3	3	*
* 6980.0	9.4	291	2.5	237	7.6	8.1	3	*
* 6982.0	11.2	280	2.6	237	7.5	8.0	1	*
* 6984.0	11.8	316	2.6	237	7.4	8.4	1	*
* 6986.0	13.1	274	2.5	236	7.3	8.6	3	*
* 6988.0	9.2	298	2.5	237	7.3	8.2	3	*
* 6990.0	12.1	283	2.5	239	7.5	7.6	3	*
* 6992.0			2.5	239	7.6	7.6		*
* 6994.0			2.4	238	7.6	7.6		*
* 6996.0	17.7	277	2.3	236	7.6	7.5	1	*
* 6998.0	7.7	249	2.3	235	7.7	7.6	2	*
* 7000.0	7.0	254	2.4	233	7.8	7.8	2	*
* 7002.0	4.2	263	2.4	232	7.8	8.0	2	*
* 7004.0	4.8	256	2.3	232	7.8	8.0	4	*
* 7006.0	7.6	273	2.2	232	7.7	8.2	1	*
* 7008.0	12.6	280	2.1	231	7.8	8.3	3	*
* 7010.0	9.9	268	2.1	232	7.9	8.3	3	*

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* FORMATION *	* BOREHOLE *		* QUAL. *				
* ----- *	* INDEX *		* BEST *				
* DEPTH *	* DIP *	* DIP *	* DEV. *	* DEV. *	* DIAM *	* DIAM *	* =4 *
* *	* AZI. *	* *	* AZI. *	* 1-3 *	* 2-4 *	* *	* *
* 7012.0	11.0	273	2.1	232	7.7	8.3	1 *
* 7014.0	14.1	264	2.1	232	7.8	8.1	3 *
* 7016.0	12.8	273	2.1	232	7.8	8.0	3 *
* 7018.0			2.1	231	7.7	7.9	* *
* 7020.0			2.1	232	7.7	7.9	* *
* 7022.0	7.8	269	2.2	232	7.6	8.0	2 *
* 7024.0	12.6	253	2.2	233	7.5	8.0	2 *
* 7026.0			2.2	232	7.4	8.1	* *
* 7028.0	8.1	262	2.1	232	7.3	8.1	2 *
* 7030.0	14.4	214	2.1	232	7.3	8.0	2 *
* 7032.0	6.6	276	2.0	232	7.3	8.0	2 *
* 7034.0			2.0	232	7.6	8.1	* *
* 7036.0	4.6	241	2.0	231	7.5	8.0	4 *
* 7038.0	4.0	248	2.1	231	7.1	8.0	4 *
* 7040.0	4.4	243	2.1	231	7.1	8.0	4 *
* 7042.0	6.8	263	2.0	231	7.0	8.2	4 *
* 7044.0	5.3	251	2.0	230	6.9	8.4	4 *
* 7046.0	5.9	257	2.0	230	6.9	8.4	4 *
* 7048.0	6.1	250	2.0	230	7.0	8.4	4 *
* 7050.0	7.5	241	2.0	229	7.1	8.3	4 *
* 7052.0	4.0	227	2.0	228	7.1	8.3	1 *
* 7054.0			2.0	228	7.1	8.6	* *
* 7056.0			2.0	229	7.1	9.4	* *
* 7058.0			2.0	231	7.4	9.8	* *
* 7060.0			2.0	232	8.0	9.5	* *
* 7062.0			1.9	232	8.4	9.3	* *
* 7064.0			2.0	232	8.8	8.5	* *
* 7066.0			2.1	231	8.9	7.8	* *
* 7068.0			2.1	230	8.7	7.7	* *
* 7070.0			2.2	228	8.2	7.8	* *
* 7072.0	6.1	237	2.2	229	7.3	7.9	3 *
* 7074.0	8.6	238	2.2	229	7.2	8.0	4 *
* 7076.0	8.1	244	2.2	227	7.2	8.0	4 *
* 7078.0	5.7	246	2.1	227	7.2	8.0	4 *
* 7080.0	2.6	243	2.0	228	7.3	8.0	4 *
* 7082.0	5.1	244	2.0	227	7.3	8.0	4 *
* 7084.0	8.1	247	2.0	226	7.3	8.1	4 *
* 7086.0	5.4	280	1.9	225	7.2	8.4	4 *
* 7088.0	5.2	286	1.9	225	7.1	8.5	4 *
* 7090.0	1.9	35	1.9	225	7.2	8.6	2 *
* 7092.0			2.0	226	7.2	8.6	* *
* 7094.0	3.7	255	1.9	225	6.9	8.6	1 *
* 7096.0	5.3	250	1.9	223	6.9	8.2	3 *
* 7098.0	3.1	222	1.9	223	6.8	7.7	1 *
* 7100.0	5.3	247	1.8	223	6.6	7.6	1 *

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#          *   FORMATION          *           BDRPHOLE           *   QUAL.   *
#          *-----*-----*-----*-----*-----*-----*-----*-----*
# DEPTH  *   DIP      DIP      *   DEV.    DEV.    DIAM    DIAM  * BEST     *
#          *         AZI.     *         AZI.     1-3    2-4  *  =4      *
*****
# 7102.0                1.9    223      6.9    7.6      *
# 7104.0    13.1      265      2.0    223      7.1    7.6      1 *
# 7106.0     2.0       40       2.0    223      7.1    7.6      1 *
# 7108.0     4.0      273      2.0    224      7.2    7.5      1 *
# 7110.0                2.0    224      7.2    7.4      *
# 7112.0                1.9    222      7.1    7.8      *
# 7114.0     4.2      246      1.6    220      7.2    8.4      2 *
# 7116.0     8.9      231      1.8    221      7.3    8.6      2 *
# 7118.0     6.6      207      1.8    223      7.1    8.2      2 *
# 7120.0     6.5      263      1.8    223      7.0    7.8      2 *
# 7122.0     8.0      257      1.8    223      6.9    7.7      2 *
# 7124.0    11.0      190      1.7    221      6.8    7.6      2 *
# 7126.0    11.6      195      1.6    219      6.8    7.6      2 *
# 7128.0     7.9      216      1.7    219      6.8    7.7      2 *
# 7130.0     3.9      223      1.8    220      6.7    7.6      2 *
# 7132.0     7.2      254      1.9    221      6.7    7.5      2 *
# 7134.0     5.3      236      1.8    222      6.6    7.5      1 *
# 7136.0                1.7    220      6.6    7.4      *
# 7138.0                1.6    219      6.8    7.4      *
# 7140.0     6.9      256      1.7    219      6.8    7.5      3 *
# 7142.0     5.8      266      1.7    219      6.8    7.5      3 *
# 7144.0                1.6    218      6.8    7.5      *
# 7146.0     5.7      246      1.7    218      6.8    7.5      3 *
# 7148.0     5.6      251      1.7    219      7.0    7.5      3 *
# 7150.0     7.3      225      1.7    219      7.1    7.4      1 *
# 7152.0     6.5      220      1.7    219      7.1    7.7      1 *
# 7154.0     5.9      226      1.7    219      7.1    7.7      4 *
# 7156.0     5.5      224      1.7    219      7.1    7.4      4 *
# 7158.0     4.5      231      1.7    219      7.1    7.4      4 *
# 7160.0     4.2      234      1.7    218      7.1    7.5      4 *
# 7162.0     3.8      228      1.6    217      7.1    7.5      4 *
# 7164.0     4.0      243      1.6    218      7.1    7.5      4 *
# 7166.0     4.7      234      1.6    218      7.1    7.5      4 *
# 7168.0     5.3      230      1.6    218      7.1    7.4      4 *
# 7170.0     6.5      238      1.5    216      7.1    7.4      4 *
# 7172.0     7.4      242      1.5    214      7.1    7.2      4 *
# 7174.0     9.1      256      1.5    214      7.1    7.2      4 *
# 7176.0                1.5    214      7.0    7.2      *
# 7178.0                1.5    213      7.1    7.2      *
# 7180.0                1.5    211      7.0    7.2      *
# 7182.0    13.2      249      1.6    210      7.0    7.2      1 *
# 7184.0    11.9      277      1.5    210      6.9    7.2      1 *
# 7186.0                1.5    209      6.9    7.2      *
# 7188.0     9.8      269      1.4    209      7.0    7.2      1 *
# 7190.0    14.6      278      1.4    209      6.9    7.2      3 *
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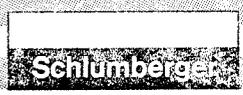
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FORMATION			BOREHOLE				QUAL.	INDEX
DEPTH	DIP	DIP	DEV.	DEV.	DIAM	DIAM	BEST	
	AZI.	AZI.			1-3	2-4	=4	
* 7282.0	59.8	58	1.1	196	7.4	6.6	1	
* 7284.0	58.8	54	1.0	195	7.4	6.5	1	
* 7286.0	57.8	53	1.0	196	7.2	6.5	1	
* 7288.0			1.0	197	7.1	6.6		
* 7290.0			1.0	197	7.2	6.6		
* 7292.0			1.0	197	7.1	6.5		
* 7294.0	6.3	285	1.0	198	7.1	6.5	4	
* 7296.0	9.7	247	1.0	199	7.1	6.5	2	
* 7298.0			1.0	198	7.1	6.5		
* 7300.0	8.7	275	1.0	199	7.0	6.5	4	
* 7302.0	10.3	265	0.9	200	6.9	6.5	2	
* 7304.0	14.8	270	1.0	199	6.7	6.4	2	
* 7306.0			1.0	197	6.7	6.5		
* 7308.0	7.7	249	0.9	196	6.6	6.5	4	
* 7310.0			0.9	196	6.6	6.5		
* 7312.0			0.9	197	6.6	6.6		
* 7314.0			0.9	199	6.6	6.7		
* 7316.0	10.3	247	0.9	198	6.6	6.7	3	
* 7318.0	10.1	242	0.9	196	6.6	6.7	3	
* 7320.0			0.9	197	6.5	6.7		
* 7322.0			0.9	200	6.4	6.7		
* 7324.0			1.0	200	6.4	6.7		
* 7326.0			1.1	198	6.4	6.6		
* 7328.0			1.1	197	6.5	6.6		
* 7330.0			1.1	197	6.5	6.6		
* 7332.0			1.2	195	6.5	6.6		
* 7334.0			1.2	193	6.5	6.6		
* 7336.0			1.2	191	6.5	6.6		
* 7338.0	8.3	265	1.2	192	6.5	6.6	4	
* 7340.0	7.0	261	1.2	193	6.5	6.6	4	
* 7342.0	7.9	249	1.2	193	6.5	6.6	4	
* 7344.0	6.8	251	1.2	191	6.5	6.6	4	
* 7346.0	4.8	259	1.2	190	6.7	6.6	4	
* 7348.0	5.5	251	1.2	189	6.7	6.6	4	
* 7350.0	12.3	239	1.2	188	6.6	6.5	2	
* 7352.0	2.1	324	1.2	187	6.6	6.4	4	
* 7354.0	4.5	261	1.2	193	6.5	6.4	4	
* 7356.0	7.7	245	1.2	191	6.5	6.4	4	
* 7358.0	2.4	28	1.2	184	6.4	6.3	4	
* 7360.0	2.8	32	1.2	182	6.4	6.4	4	
* 7362.0	3.9	285	1.2	181	6.4	6.4	2	
* 7364.0	11.6	83	1.1	181	6.3	6.3	2	
* 7366.0	9.9	71	1.0	181	6.3	6.1	2	
* 7368.0	2.4	173	1.0	183	6.4	6.0	4	
* 7370.0	3.2	272	1.0	185	6.5	6.2	4	

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* #	* FORMATION	* #	* BOREHOLE				* #	* QUAL.	* #
* #	* -----								* #
* #	* DEPTH	* DIP	* DIP	* DEV.	* DEV.	* DIAM	* DIAM	* #	* BEST
* #	* #	* AZI.	* #	* AZI.	* #	* 1-3	* 2-4	* #	* =4
* #	7462.0	13.7	263	1.2	184	6.8	6.4	3	*
* #	7464.0	20.4	260	1.2	183	6.7	6.4	3	*
* #	7466.0	6.1	233	1.2	183	6.8	6.4	3	*
* #	7468.0	6.3	232	1.2	182	6.7	6.4	3	*
* #	7470.0	12.9	249	1.2	182	6.8	6.4	1	*
* #	7472.0			1.2	181	7.0	6.4		*
* #	7474.0			1.2	180	7.4	6.5		*
* #	7476.0			1.3	179	7.5	6.5		*
* #	7478.0			1.3	176	7.5	6.5		*
* #	7480.0			1.2	175	7.5	6.5		*
* #	7482.0			1.2	175	7.0	6.5		*
* #	7484.0			1.2	174	7.0	6.5		*
* #	7486.0			1.2	174	7.0	6.5		*
* #	7488.0			1.2	173	6.8	6.5		*
* #	7490.0			1.3	173	6.8	6.5		*
* #	7492.0	12.5	274	1.3	169	6.7	6.6	2	*
* #	7494.0	8.3	246	1.3	166	6.6	6.6	2	*
* #	7496.0			1.3	168	6.7	6.7		*
* #	7498.0			1.3	168	6.8	6.6		*
* #	7500.0	7.8	194	1.3	166	6.8	6.6	2	*
* #	7502.0	21.6	238	1.3	165	6.7	6.5	2	*
* #	7504.0	12.7	267	1.3	165	6.7	6.5	4	*
* #	7506.0	5.2	260	1.3	165	6.7	6.5	4	*
* #	7508.0	10.4	255	1.3	164	6.6	6.5	4	*
* #	7510.0	13.2	244	1.3	164	6.7	6.3	4	*
* #	7512.0	11.7	253	1.3	162	6.7	6.2	1	*
* #	7514.0			1.3	161	6.6	6.3		*
* #	7516.0			1.3	161	6.5	6.3		*
* #	7518.0			1.3	158	6.5	6.4		*
* #	7520.0	41.4	340	1.3	156	6.6	6.5	1	*
* #	7522.0			1.3	156	6.8	6.7		*
* #	7524.0	13.0	259	1.2	155	6.7	6.6	1	*
* #	7526.0	5.8	255	1.2	155	6.5	6.5	1	*
* #	7528.0	15.0	259	1.2	156	6.6	6.5	3	*
* #	7530.0	14.8	257	1.2	155	7.0	6.6	1	*
* #	7532.0	13.2	284	1.2	153	7.4	6.6	4	*
* #	7534.0	12.3	288	1.2	153	7.2	6.5	4	*
* #	7536.0	19.5	265	1.2	154	6.7	6.4	2	*
* #	7538.0	5.8	293	1.2	157	6.7	6.4	2	*
* #	7540.0			1.2	158	6.4	6.1		*
* #	7542.0	23.2	274	1.2	156	6.1	5.8	2	*
* #	7544.0	21.0	280	1.2	153	6.3	5.9	2	*
* #	7546.0	15.7	283	1.2	150	6.3	5.9	4	*
* #	7548.0	11.5	274	1.2	149	6.3	6.1	2	*
* #	7550.0	9.1	286	1.1	149	6.4	6.3	2	*

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*          * FORMATION *          BOREHOLE *          * OUAL. *
*          *-----*-----*          * INDEX *
* DEPTH *  DIP   DIP   *  DEV.  DEV.  DIAM  DIAM * BEST *
*          *     AZI. *     AZI.  1-3   2-4 *  =4  *
*****
* 7552.0  11.7   296   *  1.1   151   6.4   6.3   2   *
* 7554.0  14.5   275   *  1.9   151   6.1   6.2   2   *
* 7556.0           *  1.1   151   6.0   6.3   *
* 7558.0  12.5   292   *  1.2   154   6.3   6.5   4   *
* 7560.0  12.1   276   *  1.2   155   6.4   6.4   2   *
* 7562.0  13.9   293   *  1.2   152   6.3   6.4   4   *
* 7564.0  20.4   281   *  1.2   150   6.2   6.4   2   *
* 7566.0  18.6   281   *  1.2   150   6.2   6.4   2   *
* 7568.0  16.4   285   *  1.2   150   6.3   6.4   4   *
* 7570.0  18.1   286   *  1.2   150   6.3   6.4   2   *
* 7572.0  16.2   295   *  1.2   151   6.4   6.4   4   *
* 7574.0  14.8   294   *  1.2   151   6.6   6.4   4   *
* 7576.0  18.0   290   *  1.2   150   6.7   6.3   4   *
* 7578.0  19.6   281   *  1.2   150   6.7   6.4   4   *
* 7580.0  25.0   287   *  1.3   149   6.6   6.4   4   *
* 7582.0  22.6   287   *  1.3   148   6.7   6.4   4   *
* 7584.0  20.5   294   *  1.4   146   6.6   6.3   2   *
* 7586.0  26.3   306   *  1.4   144   6.2   6.1   2   *
* 7588.0           *  1.4   145   6.4   6.2   *
* 7590.0           *  1.4   147   6.5   6.3   *
* 7592.0           *  1.5   147   6.3   6.3   *
* 7594.0           *  1.6   147   6.4   6.4   *
* 7596.0  42.3   290   *  1.6   146   6.6   6.3   1   *
* 7598.0           *  1.7   146   6.5   6.9   *
* 7600.0           *  1.8   144   6.5   6.0   *
* 7602.0           *  1.8   145   6.5   6.4   *
* 7604.0  40.4   295   *  1.9   146   6.5   6.4   1   *
* 7606.0  39.1   291   *  1.9   146   6.5   6.5   1   *
* 7608.0           *  1.9   144   6.5   6.6   *
* 7610.0           *  1.9   143   6.5   6.5   *
* 7612.0           *  1.9   141   6.5   6.5   *
* 7614.0           *  2.0   140   6.5   6.4   *
* 7616.0           *  2.0   139   6.5   6.1   *
* 7618.0           *  2.0   137   6.5   6.1   *
* 7620.0           *  2.0   135   6.5   6.1   *
* 7622.0           *  2.0   133   6.2   6.2   *
* 7624.0           *  2.1   132   6.1   6.4   *
* 7626.0           *  2.1   132   6.2   6.4   *
* 7628.0           *  2.1   132   6.2   6.4   *
* 7630.0           *  2.1   133   6.3   6.4   *
* 7632.0  14.8   289   *  2.1   133   6.5   6.4   4   *
* 7634.0  14.6   288   *  2.1   134   6.5   6.4   4   *
* 7636.0  14.6   285   *  2.1   134   6.5   6.3   4   *
* 7638.0  12.8   288   *  2.1   134   6.5   6.2   4   *
* 7640.0  13.7   290   *  2.1   133   6.5   6.1   3   *
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* FORMATION *	* BOREHOLE *		* QUAL. *		* INDEX *		
* DEPTH *	* DIP *	* DIP *	* DEV. *	* DEV. *	* DIAM 1-3 *	* DIAM 2-4 *	* REST =4 *
	* AZI. *		* AZI. *				
* 7642.0	17.5	276	2.0	132	6.5	6.2	1
* 7644.0			2.0	132	6.5	6.4	
* 7646.0			2.0	132	6.4	6.6	
* 7648.0			2.0	133	6.4	5.6	
* 7650.0	6.2	280	2.0	133	6.5	5.6	3
* 7652.0			2.0	132	6.5	6.5	
* 7654.0	4.9	297	2.0	132	6.5	6.4	1
* 7656.0			2.0	134	6.5	6.3	
* 7658.0	7.0	271	2.0	135	6.5	6.3	3
* 7660.0	8.0	273	2.0	136	6.5	6.2	1
* 7662.0	6.0	274	2.0	137	6.6	6.2	1
* 7664.0			2.0	135	6.6	6.3	
* 7666.0	20.3	263	2.1	134	6.6	6.4	4
* 7668.0	16.8	261	2.1	134	6.6	6.4	4
* 7670.0	16.8	255	2.1	134	6.6	6.4	4
* 7672.0	15.8	251	2.2	133	6.5	6.4	4
* 7674.0	9.2	293	2.3	132	6.5	6.4	2
* 7676.0	11.5	283	2.4	133	6.5	6.5	2
* 7678.0	11.8	294	2.4	133	6.5	6.5	2
* 7680.0			2.4	133	6.4	6.5	
* 7682.0			2.5	133	6.2	6.5	
* 7684.0			2.5	134	6.2	6.5	
* 7686.0	9.4	273	2.6	135	6.1	6.4	4
* 7688.0	6.9	275	2.7	133	6.1	6.5	4
* 7690.0	6.2	295	2.8	134	6.1	6.4	2
* 7692.0	8.5	290	2.8	138	6.0	6.2	4
* 7694.0	8.0	296	2.8	138	6.0	6.1	2
* 7696.0	8.6	340	2.8	138	6.0	6.2	2
* 7698.0	10.5	312	2.8	138	6.1	6.4	2
* 7700.0	7.8	311	2.8	137	6.1	6.4	2
* 7702.0			2.8	137	6.2	6.4	
* 7704.0	11.7	282	2.8	137	6.1	6.4	2
* 7706.0	10.2	288	2.8	137	6.1	6.4	4
* 7708.0	9.5	278	2.8	136	6.1	6.3	4
* 7710.0	19.1	314	2.9	137	6.1	6.3	2
* 7712.0	16.2	306	2.9	136	6.0	6.3	4
* 7714.0	8.8	304	2.9	135	6.0	6.4	4
* 7716.0	6.4	309	2.9	134	6.0	6.2	4
* 7718.0	7.1	293	3.0	133	5.9	6.0	4
* 7720.0			2.9	133	5.9	6.1	
* 7722.0	13.5	264	2.9	131	5.9	6.4	1
* 7724.0	6.3	308	2.9	131	5.9	6.4	3
* 7726.0	6.8	304	2.8	133	5.9	6.4	3
* 7728.0	8.7	336	2.8	134	5.9	6.4	1
* 7730.0	7.1	307	2.9	133	5.8	6.4	3

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* DEPTH	* DIP	* DIP	* DEV.	* DEV.	* DIAM	* DIAM	* QUAL.	* INDEX
		AZI.		AZI.	1-3	2-4	* =4	
* 7732.0	8.8	312	2.9	132	6.0	6.4	1	*
* 7734.0			2.8	131	6.3	5.5		*
* 7736.0	9.6	315	2.8	132	6.5	6.6	1	*
* 7738.0	12.8	340	2.8	141	6.6	6.7	1	*
* 7740.0			2.8	131	6.6	6.6		*
* 7742.0			2.8	134	6.6	6.7		*
* 7744.0			2.8	135	6.7	6.7		*
* 7746.0	6.6	333	2.8	134	6.8	6.4	1	*
* 7748.0	5.1	122	2.9	133	6.8	6.3	1	*
* 7750.0	5.6	357	2.9	143	6.8	5.9	1	*
* 7752.0	6.9	352	3.0	133	6.8	5.5	1	*
* 7754.0			3.0	132	6.8	5.4		*
* 7756.0	5.2	328	3.0	132	6.8	5.7	1	*
* 7758.0	4.0	351	3.0	133	6.8	5.9	3	*
* 7760.0	4.5	325	3.0	134	6.8	5.9	4	*
* 7762.0	4.0	276	3.0	135	6.7	5.9	2	*
* 7764.0	3.5	298	3.1	135	6.7	6.0	4	*
* 7766.0	3.8	295	3.2	135	6.7	6.2	4	*
* 7768.0	18.8	360	3.3	135	6.8	6.5	3	*
* 7770.0	19.7	9	3.3	135	6.5	6.7	1	*
* 7772.0	17.1	181	3.3	136	6.3	6.7	1	*
* 7774.0	3.3	246	3.3	136	6.6	6.7	1	*
* 7776.0	2.0	260	3.3	136	6.8	6.7	1	*
* 7778.0	8.2	202	3.3	137	7.0	6.8	1	*
* 7780.0	3.3	182	3.4	136	7.0	6.8	1	*
* 7782.0	3.7	145	3.3	135	6.8	6.8	1	*
* 7784.0			3.4	136	7.2	6.9		*
* 7786.0			3.4	137	7.5	7.0		*
* 7788.0			3.4	137	7.0	7.0		*
* 7790.0			3.5	136	6.6	7.0		*
* 7792.0			3.5	138	6.5	7.0		*
* 7794.0			3.5	140	6.5	6.9		*
* 7796.0	7.8	40	3.6	140	6.4	6.8	1	*
* 7798.0	6.3	31	3.6	141	6.4	6.8	3	*
* 7800.0	3.2	347	3.7	139	6.5	6.7	1	*
* 7802.0			3.7	137	6.5	6.6		*
* 7804.0			3.6	136	6.5	6.5		*
* 7806.0			3.6	136	6.5	6.5		*
* 7808.0	11.0	46	3.6	136	6.5	6.4	3	*
* 7810.0	9.0	48	3.6	137	6.5	6.4	4	*
* 7812.0	9.5	51	3.6	137	6.5	6.4	4	*
* 7814.0			3.6	137	6.5	6.2		*
* 7816.0			3.6	137	6.6	6.2		*
* 7818.0			3.6	138	6.6	6.4		*
* 7820.0	10.8	62	3.6	138	6.6	6.4	4	*

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*          * FORMATION *          * BOREHOLE *          * QUAL. *
*          *-----*-----*          * INDEX *
* DEPTH *  DIP   DIP   *  DEV.  DEV.  DIAM  DIAM * BEST *
*          *     AZI. *     AZI.  1-3  2-4 * =4 *
*****
* 7912.0          *          * 3.3   132   8.9   6.6          *
* 7914.0          *          * 3.4   134   8.9   6.6          *
* 7916.0          *          * 3.3   136   8.0   6.6          *
* 7918.0          *          * 3.2   137   7.0   6.5          *
* 7920.0          *          * 3.2   136   7.5   6.4          *
* 7922.0          *          * 3.3   135   7.5   6.4          *
* 7924.0          *          * 3.2   134   6.9   6.3          *
* 7926.0          *          * 3.2   134   6.7   6.1          *
* 7928.0          *          * 3.3   134   6.7   6.2          *
* 7930.0          *          * 3.4   133   6.7   6.4          *
* 7932.0          *          * 3.5   131   6.7   6.4          *
* 7934.0          *          * 3.5   130   6.6   6.4          *
* 7936.0  29.2    232 *          * 3.5   130   6.5   6.3          3 *
* 7938.0  28.3    223 *          * 3.5   131   6.5   6.4          3 *
* 7940.0          *          * 3.5   129   6.5   6.5          *
* 7942.0          *          * 3.6   134   6.3   6.6          *
* 7944.0          *          * 3.5   140   6.2   6.5          *
* 7946.0          *          * 3.6   139   6.2   6.2          *
* 7948.0          *          * 3.5   138   6.1   6.1          *
* 7950.0          *          * 3.5   137   5.9   6.3          *
* 7952.0  8.0     152 *          * 3.5   136   6.1   6.2          1 *
* 7954.0  7.9     145 *          * 3.4   137   6.3   6.3          1 *
* 7956.0  9.4     142 *          * 3.5   137   6.3   6.4          3 *
* 7958.0  4.2     124 *          * 3.6   135   6.3   6.3          1 *
* 7960.0          *          * 3.6   136   6.2   6.3          *
* 7962.0          *          * 3.6   137   6.2   6.3          *
* 7964.0          *          * 3.5   135   6.2   6.3          *
* 7966.0          *          * 3.6   134   6.2   6.3          *
* 7968.0          *          * 3.7   133   6.2   6.3          *
* 7970.0  26.6    167 *          * 3.6   131   6.2   6.4          1 *
* 7972.0          *          * 3.6   132   6.2   6.4          *
* 7974.0  38.0    176 *          * 3.6   132   6.2   6.3          1 *
* 7976.0  30.9    172 *          * 3.6   132   6.2   6.3          3 *
* 7978.0  27.2    175 *          * 3.6   133   6.2   6.3          3 *
* 7980.0          *          * 3.6   133   6.2   6.3          *
* 7982.0          *          * 3.6   133   6.2   6.3          *
* 7984.0          *          * 3.6   133   6.2   6.3          *
* 7986.0          *          * 3.5   133   6.2   6.3          *
* 7988.0          *          * 3.5   132   6.2   6.3          *
* 7990.0  5.5     259 *          * 3.4   129   6.1   6.2          3 *
* 7992.0  4.4     249 *          * 3.5   129   5.5   5.9          3 *
* 7994.0          *          * 3.6   130   5.2   5.7          *
* 7996.0          *          * 3.6   128   5.3   5.9          *
* 7998.0          *          * 3.6   127   5.4   6.0          *
* 8000.0          *          * 3.6   128   5.7   6.1          *
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* FORMATION *		* BOREHOLE *				* QUAL. *		
* DEPTH *	* DIP *	* DIP *	* DEV. *	* DEV. *	* DIAM 1-3 *	* DIAM 2-4 *	* REST =4 *	* INDEX *
	* AZI. *		* AZI. *					

* 8002.0			3.5	128	6.1	6.3		*
* 8004.0			3.4	129	6.4	6.4		*
* 8006.0			3.3	128	6.4	6.4		*
* 8008.0			3.2	128	6.4	6.4		*
* 8010.0	4.3	69	3.2	129	6.4	6.4	1	*
* 8012.0	8.2	175	3.2	130	6.4	6.4	1	*
* 8014.0	4.8	148	2.9	130	6.4	6.3	3	*
* 8016.0	1.9	137	2.9	131	6.4	6.3	1	*
* 8018.0	13.9	208	2.9	133	6.4	6.3	3	*
* 8020.0	19.1	211	2.9	134	6.4	6.3	3	*
* 8022.0			2.8	132	6.4	6.3		*
* 8024.0			2.7	131	6.4	6.3		*
* 8026.0			2.7	133	6.3	6.1		*
* 8028.0			2.8	134	6.2	6.1		*
* 8030.0	13.2	145	2.8	134	6.0	6.3	1	*
* 8032.0			2.8	134	5.8	6.3		*
* 8034.0	12.5	134	2.8	134	5.9	6.3	1	*
* 8036.0	10.8	155	2.6	133	6.0	6.3	1	*
* 8038.0	15.9	124	2.8	134	6.1	6.3	1	*
* 8040.0			2.8	135	6.1	6.3		*
* 8042.0			2.8	135	6.1	6.3		*
* 8044.0			2.7	135	6.1	6.3		*
* 8046.0			2.7	132	6.0	6.3		*
* 8048.0			2.7	131	6.0	6.3		*
* 8050.0			2.7	132	6.1	6.3		*
* 8052.0			2.8	132	6.1	6.3		*
* 8054.0			2.7	134	6.1	6.3		*
* 8056.0			2.7	134	6.1	6.3		*
* 8058.0	32.4	29	2.7	133	6.2	6.4	1	*
* 8060.0	32.5	22	2.7	134	6.1	6.4	1	*
* 8062.0			2.7	135	6.0	6.4		*
* 8064.0			2.7	135	6.0	6.4		*
* 8066.0			2.7	134	6.0	6.4		*
* 8068.0			2.7	133	6.0	6.3		*
* 8070.0	29.0	236	2.7	132	6.0	6.3	2	*
* 8072.0	34.2	229	2.7	130	6.0	6.3	2	*
* 8074.0	36.2	235	2.6	130	6.0	6.3	2	*
* 8076.0	32.3	237	2.7	129	6.0	6.3	2	*
* 8078.0	36.0	230	2.7	128	6.0	6.3	2	*
* 8080.0	35.1	230	2.7	129	6.1	6.3	2	*
* 8082.0	27.5	226	2.6	129	6.3	6.3	4	*
* 8084.0	25.2	219	2.5	130	6.3	5.9	4	*
* 8086.0	17.3	220	2.5	130	6.1	5.5	4	*
* 8088.0			2.5	131	5.9	5.1		*
* 8090.0	32.9	189	2.5	133	5.7	4.7	1	*

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* FORMATION *	* BOREHOLE *		* GUAL. *				
* ----- *	* INDEX *		* BEST *				
* DEPTH *	* DIP *	* DIP *	* DEV. *	* DEV. *	* DIAM *	* DIAM *	* =4 *
* *	* AZI. *	* *	* AZI. *	* 1-3 *	* 2-4 *	* 3 *	* 4 *

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* 8092.0			2.6	133	5.6	4.6	*
* 8094.0			2.5	133	5.5	4.6	*
* 8096.0			2.5	134	5.5	4.6	*
* 8098.0	27.1	205	2.5	135	5.6	4.6	1 *
* 8100.0	25.2	197	2.6	134	5.8	4.8	3 *
* 8102.0	36.9	215	2.7	133	6.0	5.1	1 *
* 8104.0	34.9	216	2.8	134	6.1	5.2	3 *
* 8106.0	28.3	220	2.8	132	6.1	5.2	1 *
* 8108.0	26.2	203	2.8	131	6.1	5.2	1 *
* 8110.0	29.0	212	2.8	134	6.1	5.3	3 *
* 8112.0	37.0	217	2.8	134	6.1	5.3	3 *
* 8114.0	34.7	216	2.8	133	6.2	5.6	3 *
* 8116.0	26.9	216	2.8	133	6.3	6.0	3 *
* 8118.0			2.8	133	6.4	6.2	*
* 8120.0			2.8	132	6.4	6.2	*
* 8122.0			2.8	133	5.9	6.1	*
* 8124.0			2.8	132	5.1	5.9	*
* 8126.0			2.8	131	4.5	5.9	*
* 8128.0			2.8	132	4.5	6.0	*
* 8130.0	31.5	222	2.8	132	4.5	6.0	3 *
* 8132.0	26.4	220	2.8	132	4.5	6.0	1 *
* 8134.0			2.8	132	4.5	6.0	*
* 8136.0			2.8	132	4.5	6.0	*
* 8138.0			2.8	131	4.5	6.0	*
* 8140.0			2.8	131	4.5	6.0	*
* 8142.0			2.8	130	4.5	6.0	*
* 8144.0	28.7	227	2.7	129	4.8	6.0	1 *
* 8146.0			2.8	128	5.5	6.1	*
* 8148.0			2.7	128	5.8	6.1	*
* 8150.0			2.7	130	5.9	6.1	*
* 8152.0			2.8	130	6.0	6.1	*
* 8154.0			2.8	129	6.1	6.1	*
* 8156.0			2.8	130	6.0	6.1	*
* 8158.0			2.8	131	6.0	6.1	*
* 8160.0			2.7	131	6.0	6.1	*
* 8162.0			2.7	133	6.2	6.1	*
* 8164.0	40.6	229	2.7	134	6.3	6.0	1 *
* 8166.0	39.1	228	2.8	130	6.3	6.0	3 *
* 8168.0	38.0	228	2.7	127	6.2	6.1	1 *

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*          *   FORMATION   *           BOREHOLE           *   QUAL.   *
*          *-----*-----*-----*-----*-----*-----*-----*
* DEPTH  *   DIP   DIP   *   DEV.   DEV.   DIAM   DIAM   *   BEST   *
*          *       AZI.  *       AZI.   1-3   2-4   *   =4   *
*****
* 7862.0                3.0   132    6.7    7.0                *
* 7864.0                3.0   133    6.7    7.1                *
* 7866.0                3.1   133    6.7    7.0                *
* 7868.0                3.1   133    6.3    6.9                *
* 7870.0                3.1   132    6.2    6.6                *
* 7872.0                3.1   132    6.7    6.5                *
* 7874.0                3.0   130    6.7    6.5                *
* 7876.0                3.0   129    6.8    6.6                *
* 7878.0                3.0   129    6.9    6.6                *
* 7880.0                3.0   129    6.9    6.5                *
* 7882.0                3.1   129    7.0    6.5                *
* 7884.0                3.1   130    7.0    6.5                *
* 7886.0   15.8   243    3.1   130    6.9    6.2    3                *
* 7888.0   15.8   237    3.1   131    6.9    6.2    3                *
* 7890.0   28.2   165    3.2   132    6.9    6.5    3                *
* 7892.0                3.2   133    7.1    6.6                *
* 7894.0   14.9   228    3.2   134    7.6    6.7    1                *
* 7896.0   15.3   214    3.3   136    8.4    6.8    1                *
* 7898.0                3.3   137    9.2    6.8                *
* 7900.0                3.3   136    8.9    6.7                *
* 7902.0   3.8    251    3.3   135    8.0    6.7    1                *
* 7904.0                3.2   136    8.0    6.7                *
* 7906.0                3.2   135    8.5    6.7                *
* 7908.0                3.2   132    9.4    6.7                *
* 7910.0                3.2   131    9.3    6.7                *
* 7912.0                3.4   129    8.7    6.7                *
* 7914.0   4.2    242    3.0   133    7.4    6.3    3                *
* 7916.0   1.9    191    3.0   136    8.1    5.8    3                *
* 7918.0                3.6   133    6.3    5.7                *
* 7920.0                3.6   134    6.5    6.0                *
* 7922.0                3.5   136    6.7    6.4                *
* 7924.0                3.5   136    6.8    6.6                *
* 7926.0                3.6   135    6.8    6.6                *
* 7928.0                3.6   136    6.8    6.6                *
* 7930.0                3.6   137    6.8    6.6                *
* 7932.0                3.6   137    6.7    6.6                *
* 7934.0                3.6   136    6.7    6.6                *
* 7936.0                3.5   134    6.7    6.4                *
* 7938.0                3.5   134    6.7    6.1                *
* 7940.0                3.7   134    6.8    6.2                *
* 7942.0                3.7   134    6.8    6.4                *
* 7944.0                3.5   133    6.7    6.1                *
* 7946.0   25.9    11    3.5   132    6.6    6.2    1                *
* 7948.0   7.5     8    3.6   131    6.7    6.4    1                *
* 7950.0   9.6     73    3.3   129    6.4    5.9    1                *
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*          *   FORMATION   *           BOREHOLE           *   QUAL.   *
*          *-----*-----*-----*-----*-----*-----*-----*-----*
* DEPTH   *   DIP     DIP   *   DEV.   DEV.   DIAM   DIAM   * BEST     *
*          *          AZI.  *          AZI.   1-3   2-4   *  =4      *
*****
* 7952.0  17.5     42     *   3.4   128   6.1   5.3   * 1        *
* 7954.0   6.9     46     *   3.5   128   6.3   5.5   * 1        *
* 7956.0   3.0     22     *   3.5   128   6.5   6.0   * 1        *
* 7958.0   3.5     129   *   3.5   129   6.5   6.2   *          *
* 7960.0   3.5     130   *   3.5   130   6.4   6.1   *          *
* 7962.0   3.5     129   *   3.5   129   6.4   6.0   *          *
* 7964.0   3.5     129   *   3.5   129   6.4   5.0   *          *
* 7966.0  15.6     221   *   3.4   130   6.4   6.0   * 1        *
* 7968.0  43.3     204   *   3.3   130   6.4   6.1   * 1        *
* 7970.0  45.0     197   *   3.3   129   6.4   6.1   * 1        *
* 7972.0   3.3     129   *   3.3   129   6.4   6.1   *          *
* 7974.0   3.1     130   *   3.1   130   6.4   6.1   *          *
* 7976.0  19.8     231   *   3.1   129   6.4   6.1   * 1        *
* 7978.0  19.2     220   *   3.2   127   6.4   6.1   * 1        *
* 7980.0  20.7     215   *   3.2   126   6.4   6.1   * 1        *
* 7982.0   3.1     125   *   3.1   125   6.4   6.1   *          *
* 7984.0   3.1     125   *   3.1   125   6.4   6.1   *          *
* 7986.0  28.1     216   *   3.1   126   6.4   6.1   * 1        *
* 7988.0  27.6     212   *   3.0   128   6.4   6.1   * 1        *
* 7990.0  26.1     225   *   3.0   130   6.4   6.1   * 3        *
* 7992.0  23.3     225   *   3.0   131   6.5   6.1   * 3        *
* 7994.0   5.7     92     *   3.0   130   6.5   6.2   * 3        *
* 7996.0  15.6     218   *   3.0   131   6.4   6.2   * 3        *
* 7998.0   3.0     131   *   3.0   131   6.3   6.1   *          *
* 8000.0   2.9     130   *   2.9   130   6.3   6.1   *          *
* 8002.0   3.0     131   *   3.0   131   6.3   6.1   *          *
* 8004.0   3.0     133   *   3.0   133   6.4   6.0   *          *
* 8006.0   3.0     133   *   3.0   133   6.4   6.0   *          *
* 8008.0  23.1     200   *   3.0   133   6.4   6.0   * 3        *
* 8010.0   8.1     181   *   3.0   133   6.4   6.0   * 3        *
* 8012.0   9.6     178   *   3.0   134   6.3   6.0   * 3        *
* 8014.0  30.0     198   *   3.0   134   6.3   6.0   * 1        *
* 8016.0  24.5     198   *   2.9   133   6.3   6.0   * 1        *
* 8018.0  23.3     203   *   2.9   131   6.3   6.0   * 3        *
* 8020.0  27.4     215   *   2.8   132   6.3   6.0   * 1        *
* 8022.0  26.0     229   *   2.8   133   6.3   6.0   * 3        *
* 8024.0  27.6     224   *   2.8   133   6.3   6.0   * 3        *
* 8026.0   2.7     133   *   2.7   133   6.3   6.0   *          *
* 8028.0   2.7     134   *   2.7   134   6.3   6.0   *          *
* 8030.0  18.0     255   *   2.8   136   6.3   6.0   * 1        *
* 8032.0  25.3     220   *   2.8   136   6.3   6.0   * 1        *
* 8034.0  23.2     228   *   2.8   134   6.3   6.0   * 1        *
* 8036.0  21.2     221   *   2.8   134   6.3   6.0   * 1        *
* 8038.0   2.8     139   *   2.8   139   6.3   6.0   *          *
* 8040.0   2.8     138   *   2.8   138   6.3   6.0   *          *
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<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  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:
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: ANSCHUTZ RANCH 34-1
2. NAME OF OPERATOR: ANSCHUTZ CORPORATION, THE	9. API NUMBER: 43043300760000
3. ADDRESS OF OPERATOR: 555 17th Street Suite 2400 , Denver , CO, 80202	PHONE NUMBER: 303 298-1000 Ext
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1947 FSL 1994 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSE Section: 34 Township: 04.0N Range: 07.0E Meridian: S	9. FIELD and POOL or WILDCAT: ANSCHUTZ RANCH
	COUNTY: SUMMIT
	STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: <b>6/1/2016</b>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input checked="" type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
 Please see the attached plug and abandon procedure.

**Approved by the  
 Utah Division of  
 Oil, Gas and Mining**

Date: May 05, 2016  
 By: *Debra K. Quist*

**Please Review Attached Conditions of Approval**

NAME (PLEASE PRINT) Bill Miller	PHONE NUMBER 303 298-1000	TITLE
SIGNATURE N/A	DATE 4/14/2016	



**The Utah Division of Oil, Gas, and Mining**

- State of Utah  
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

**Sundry Conditions of Approval Well Number 43043300760000**

- 1. Notify the Division at least 24 hours prior to conducting abandonment operations. Please call Dan Jarvis at 801-538-5338.**
- 2. All balanced plugs shall be tagged to ensure they are at the depths specified in the procedure.**
  - 3. All annuli shall be cemented from a minimum depth of 100' to the surface.**
  - 4. Surface reclamation shall be done in accordance with R649-3-34 – Well Site Restoration.**
  - 5. All requirements in the Oil and Gas Conservation General Rule R649-3-24 shall apply.**
- 6. If there are any changes to the procedure or the wellbore configuration, notify Dustin Doucet at 801-538-5281 (ofc) or 801-733-0983 (home) prior to continuing with the procedure.**
- 7. All other requirements for notice and reporting in the Oil and Gas Conservation General Rules shall apply.**

# Wellbore Diagram

API Well No: 43-043-30076-00-00 Permit No: Well Name/No: ANSCHUTZ RANCH 34-1  
 Company Name: ANSCHUTZ CORPORATION, THE  
 Location: Sec: 34 T: 4N R: 7E Spot: NWSE  
 Coordinates: X: 488237 Y: 4542753  
 Field Name: ANSCHUTZ RANCH  
 County Name: SUMMIT

### String Information

String	Bottom (ft sub)	Diameter (inches)	Weight (lb/ft)	Length (ft)	Capacity (f/cf)
HOL1	2220	17.5			
SURF	2220	13.325	54		
HOL2	8190	7.75			
PROD	7828	5.5	15.5		7.483

Handwritten notes:  $7\frac{3}{4}'' \times 5\frac{1}{2}'' (108)$  → 4.322  
 $13\frac{7}{8}'' \times 5\frac{1}{2}''$  → 1.423

Cement from 2220 ft. to surface  
 2100'  
 Surface: 13.325 in. @ 2220 ft.  
 C.C.R. @ 2200'  
 Hole: 17.5 in. @ 2220 ft.

### Cement Information

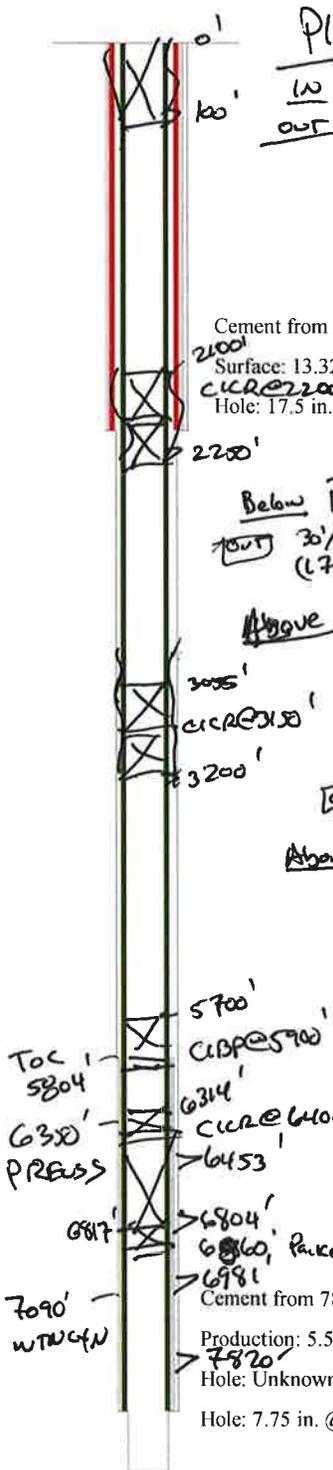
String	BOC (ft sub)	TOC (ft sub)	Class	Sacks
PROD	7828	5804	35	150
PROD	7828	5804	50	900
SURF	2220	0	G	300
SURF	2220	0	HC	1500

### Perforation Information

String	Top (ft sub)	Bottom (ft sub)	Shts/Ft	No Shts	Dt Squeeze
PROD	6453	6804			
PROD	6981	7820			

### Formation Information

Formation	Depth
PREUS	6350
TWNCR	6438
WLTCN	7090
BNDTB	7448
RICH	7497
SLDRK	7792



**Plug # 5**  
 $\frac{1W}{OUT} 100' = 125x$   
 $100' / (1.15) (1.423) = 615x$   
 $735x \text{ total}$   
 Proposed 700' ✓ OK.

**Plug # 5**  
 Below  $\frac{1W}{OUT} 50' = 65x$   
 $30' / (1.15) (4.322) = 65x$   
 $(1775x) (1.15) (1.423) = 290'$   
 Above 115x = 95' TOC @ 1960' ✓ OK  
 TOC @ 205' ✓ OK.

**Plug # 4**  
 Below  $\frac{1W}{OUT} 50' / (1.15) (7.483) = 65x$   
 $(1085x) (1.15) (4.322) = 536'$   
 TOC @ 2664' ✓ OK  
 Above  $(115x) (1.15) (7.483) = 95'$   
 TOC @ 3055' ✓ OK

**Plug # 3**  
 $(255x) (1.15) (7.483) = 215'$   
 TOC @ 5700' ✓ OK.

**Plug # 2**  
 Below  $(905x) (1.15) (7.483) = 774' \text{ max}$   
 Above  $(107x) (1.15) (7.483) = 96'$   
 TOC @ 6314' ✓ OK

**Plug # 1**  
 $(55x) (1.15) (7.483) = 43'$   
 TOC @ 6817' ✓ OK.

Cement from 7828 ft. to 5804 ft.  
 Production: 5.5 in. @ 7828 ft.  
 Hole: Unknown  
 Hole: 7.75 in. @ 8190 ft.

TD: 8190 TVD: PBD:

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

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		5. LEASE DESIGNATION AND SERIAL NUMBER: <b>Fee</b>
<small>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.</small>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____		7. UNIT or CA AGREEMENT NAME:
2. NAME OF OPERATOR: <b>ANSCHUTZ CORPORATION, THE</b>		8. WELL NAME and NUMBER: <b>Anschutz Ranch 34-1</b>
3. ADDRESS OF OPERATOR: 555 17th Street, Suite 2400 CITY Denver STATE CO ZIP 80202	PHONE NUMBER:	9. API NUMBER: <b>4304330076</b>
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1949 FSL 1923 FEL COUNTY: <b>Summit</b>		10. FIELD AND POOL, OR WILDCAT: <b>Undesignated</b>
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>SWSE 34 4N 7E</b> STATE: <b>UTAH</b>		

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

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

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

Please see the attached plug and abandon procedure.

NAME (PLEASE PRINT) RANDALL W. MAYHEW TITLE PERMITTING & REGULATORY MANAGER  
SIGNATURE R. W. Mayhew DATE 9/12/2016

(This space for State use only)

**THE ANSCHUTZ CORPORATION**  
**Anschutz Ranch 34-1**  
**SWSE, 1949' FSL & 1923' FEL, Sec. 34-4N-7E**  
**Summit Co., UT**  
**API # 49-043-30076**

**PLUG AND ABANDON PROCEDURE**

Pertinent Data Sheet

**Field:** **Elevation:** 7754'GL/7768'KB **TD:** 8,190' TVD  
**Spud Date:** 5/29/1978 **Rig:** **PBTD:** 7,820' TVD

**CASING PROGRAM:**

<u>Hole Size</u>	<u>Csg Size</u>	<u>Wt. &amp; Grade</u>	<u>Depth Set</u>	<u>Cement</u>	<u>TOC</u>
	20"		0-120'		Surface
17.5"	13.375"	54&61# J-55,LTC	0-2200'	? sx	Surface
7.75"	5.5"	15.5,17&20# var	0'-7828'	1050 sx	5,804' (CBL)

**Tubular:** 5-1/2" 15.5 K-55 – Burst: 4,810 psi (100%), 2,886 psi (60%); Collapse: 4,040 psi (100%); ID drift – 4.825", Capacity: 0.0238 bbls/ft  
5-1/2" 17# K-55 - Burst: 5,320 psi (100%), 3,192 psi (60%); Collapse: 4,910 psi (100%); ID drift – 4.767", Capacity: 0.0232 bbls/ft  
5-1/2" 20# P-110 – Burst: 12,640 psi (100%), 7,584 psi (60%); Collapse: 11,080 psi (100%); ID drift – 4.653", Capacity: 0.0221 bbls/ft  
2-7/8" 6.5# N-80 – Burst: 15,000 psi (100%); Capacity: 0.00579 bbls/ft

**Wellhead:** Unknown

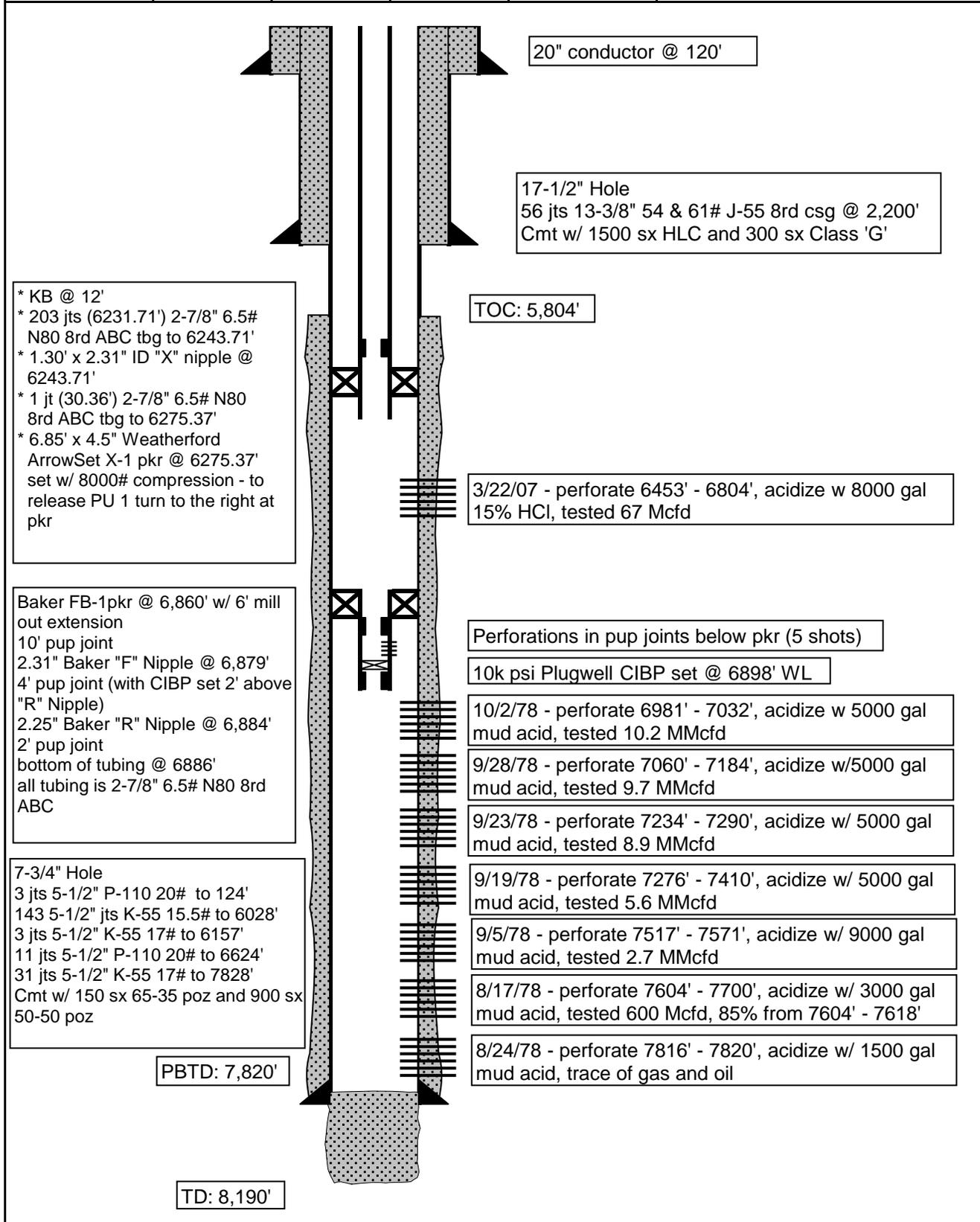
**All Depths KB (unless noted otherwise)**

1. MIRU pulling unit and equipment (tanks, work fluid)
2. Check and record well pressures. 2-7/8" tbg. 2-7/8" x 5-1/2" annulus and 5-1/2" x 13-3/8" annulus.
3. Kill well with 75 bbls of 9.8 ppg mud laden fluid.
4. ND wellhead. NU 5K BOP. Pressure test.
5. Release ArrowSet X-1 packer (set in 8K# compression) with 1 turn to the right at packer. Allow well to equalize. POH with 2-7/8", 6.5#, N-80 8rd EUE tubing and packer. LD packer.
6. RIH with 4.5" bit with bit sub to top of Baker FB-1 packer at 6,860'. POH and LD bit.
7. RU wireline and land 2.31" blanking plug in Baker "F" nipple at 6,879'. Dump 5 sacks of cement on top of packer for a 50' cement top.
8. RIH with 5-1/2" (20#) cement retainer with stinger assembly on 2-7/8" tubing. Set retainer at ~6,400'. Pressure test retainer. Sting into retainer.

9. Mix and pump 100 sacks of 15.6 ppg cement. Pump 90 sacks below retainer, sting out and pump 10 sacks on top of retainer for a top of cement at 6,300'.
10. Load hole with 140 bbls of 9.8 ppg mud laden fluid.
11. Pressure test casing to 500 psi for 15 mins, document results. Release pressure.
12. RIH with 5-1/2" (15.5#) CIBP and set at 5,900'. Place and dump 25 sacks (200' of cement on top).  
POH.
13. Perforate for squeeze at 3,200' with a minimum of 4 holes. RD wireline.
14. Establish injection down casing. Leaving 5-1/2" x 13-3/8" annulus open.
15. RIH with 5-1/2" cement retainer with stinger assembly on 2-7/8" tubing. Set retainer at ~3,150'.  
Pressure test retainer. Sting into retainer.
16. Mix and pump 125 sacks of 15.6 ppg cement. Pump 114 sacks below retainer, sting out and pump 11 sacks on top of retainer for a top of cement at 3,050'.
17. Perforate for squeeze at 2,250' with a minimum of 4 holes. RD wireline.
18. Establish injection down casing. Leaving 5-1/2" x 13-3/8" annulus open.
19. RIH with 5-1/2" cement retainer with stinger assembly on 2-7/8" tubing. Set retainer at ~2,200'.  
Pressure test retainer. Sting into retainer.
20. Mix and pump 200 sacks of 15.6 ppg cement. Pump 189 sacks below retainer, sting out and pump 11 sacks on top of retainer for a top of cement at 2,100'.
21. POH with tubing.
22. Casing punch 5-1/2" casing at 100'.
23. Mix and pump down 5-1/2" casing with 70 sacks of 15.6 ppg cement.
24. ND BOP. Cut wellhead 3' below surface.
25. Run 1" string between 5-1/2" x 13-3/8" annulus and pump cement to surface.
26. Top off 5-1/2" casing with cement.
27. Weld and cap well. Permanent monument installed showing the well number, location and name of the lease. Pipe used not less than 4" in diameter and not less than 10' in length embedded in cement.
28. GPS location for final verification.
29. Reclaim location per requirements.

# ANSCHUTZ RANCH 34-1

<b>API</b>	43-043-30076	<b>Section</b>	34	<b>Township</b>	4N	<b>Range</b>	7E	<b>Footage</b>	1949' FSL 1923' FEL
<b>County</b>	Summit	<b>State</b>	Utah			<b>Spud Date</b>	May 29, 1978		
<b>Ground Elev.</b>	7,754'	<b>KB Elev.</b>	7,768'	<b>Current as of</b>		March 28, 2007			



**ANSCHUTZ RANCH 34-1**

<b>API</b>	43-043-30076	<b>Section</b>	34	<b>Township</b>	4N	<b>Range</b>	7E	<b>Footage</b>	1949' FSL 1923' FEL
<b>County</b>	Summit	<b>State</b>	Utah			<b>Spud Date</b>	May 29, 1978		
<b>Ground Elev.</b>	7,754'	<b>KB Elev.</b>	7,768'	<b>Current as of</b>		March 28, 2007			

**Geologic Markers**

<b>Formation</b>	<b>Measured Depth</b>
Pruess Salt	6,350'
Twin Creek	6,438'
Walton Creek	7,090'
Boundary Butte	7,448'
Rich Member	7,497'
Slide Rock	7792'

**Drill Stem Tests**

<b>Test #</b>	<b>Depth</b>	<b>Recovered</b>
1	7,224' - 7,400'	663' G&WCM
2	7,407' - 7,600'	832' GCM
3	7,616' - 7,770'	60' M
4	7,755' - 7,931'	279' SGCM
5	7,941' - 8,023'	4,480' GCW

**Completions**

<b>From</b>	<b>To</b>	<b>Stimulation</b>	<b>IP Rate</b>
6453	- 6457	↑ ↓ Acidize w 8000 gal 15% HCl	67 MCFD
6507	- 6539		
6519	- 6522		
6527	- 6531		
6543	- 6554		
6585	- 6597		
6616	- 6650		
6660	- 6676		
6696	- 6704		
6710	- 6718		
6729	- 6740		
6744	- 6757		
6782	- 6786		
6794	- 6804		
6981	- 6984	↑ ↓ Acidize w 5000 gal mud acid	10,264 MCFD
6989	- 7003		
7018	- 7026		
7030	- 7032		
7060	- 7072	↑ ↓ Acidize w 5000 gal mud acid	9,729 MCFD
7094	- 7098		
7100	- 7110		
7138	- 7141		
7178	- 7184		
7234	- 7240	↑ ↓ Acidize w 5000 gal mud acid	8,892 MCFD
7247	- 7249		
7255	- 7258		
7267	- 7277		
7285	- 7290		
7276	- 7282	↑ ↓ Acidize w 5000 gal mud acid	5,622 MCFD
7406	- 7410		

## ANSCHUTZ RANCH 34-1

<b>API</b>	43-043-30076	<b>Section</b>	34	<b>Township</b>	4N	<b>Range</b>	7E	<b>Footage</b>	1949' FSL 1923' FEL
<b>County</b>	Summit	<b>State</b>	Utah			<b>Spud Date</b>	May 29, 1978		
<b>Ground Elev.</b>	7,754'	<b>KB Elev.</b>	7,768'	<b>Current as of</b>		March 28, 2007			

**Completions**

From	To	Stimulation	IP Rate
7515	- 7517		2,701 MCFD
7522	- 7524		
7531	- 7535		
7538	- 7540		
7544	- 7546		
7555	- 7557		
7565	- 7567		
7569	- 7571		
7604	- 7618		600 MCFD
7657	- 7667		
7670	- 7672		
7674	- 7676		
7679	- 7681		
7693	- 7695		
7698	- 7700		
7816	- 7820	Acidize w 1500 gal mud acid	Trace gas, oil

10-13-78 24 hour flow tested at 13.038 MMSCFD, 242 BOPD, 26 BWPD  
 4-30-80 Flow tested at 7.255 MMSCFD, 301BOPD

**WELL SEARCH****WELL DATA****WELL HISTORY****WELL ACTIVITY**

WELL NAME  API NUMBER  WELL TYPE  WELL STATUS

OPERATOR  ACCOUNT  # OPERATOR APPROVED BY BLM / BIA

DESIGNATED OPERATOR  ACCOUNT

FIELD NAME  FIELD NUMBER  FIRST PRODUCTION  LA / PA DATE

**WELL LOCATION:**

SURF LOCATION

Q. S. T. R. M.

COUNTY

**UTM Coordinates:**

SURFACE - N  BHL - N

SURFACE - E  BHL - E

LATITUDE

LONGITUDE

CONFIDENTIAL FLAG

CONFIDENTIAL DATE

DIRECTIONAL | HORIZONTAL

HORIZONTAL LATERALS

ORIGINAL FIELD TYPE

WILDCAT TAX FLAG

CB-METHANE FLAG

ELEVATION

BOND NUMBER / TYPE

LEASE NUMBER

MINERAL LEASE TYPE

SURFACE OWNER TYPE

INDIAN TRIBE

C.A. NUMBER

UNIT NAME

**CUMULATIVE PRODUCTION:**

OIL

GAS

WATER

COMMENTS

Company Name: Anschutz Corp.

Company Man: Terry Cunningham

Today's Date: 9/13/2016

AFE or Project #: \_\_\_\_\_

Company Man Cell: \_\_\_\_\_

Days on Well: \_\_\_\_\_

Well Name/Number: AR 4-1 & AR 34-1

Section/Township/Range: \_\_\_\_\_

Rig #: 34

Tool Pusher: Darie Roehm

Operator: Tony Hernandez

Rig Hand: Byron Benalli

Rig Hand: Leon Hascom

Rig Hand: \_\_\_\_\_

Drive/Hrs	Ride/Hrs	Work/Hrs	Total/Hrs	Per Diem
6.5		8.5	15	yes
5	6.5	8.5	20	yes



Task Times:		Job Steps "In Scope"	Task Times:		Job Steps "Out of Bid Scope"
6:00	6:30	Travel			
6:30	7:00	JSA meeting			
7:00	11:00	Dig out & cut off the AR 4-1 well-top well off with 5sxs cmt-weld cap & marker on-backfill			
11:00	12:00	Road equip. to the AR <del>4-1</del> 34-1			
12:00	2:00	Cut off WH-top well off with 3sxs cmt-weld cap & marker on-backfill			
2:00	3:00	Rack out & road equip. to staging area & secure			
3:00	9:00/2:00	Travel			
Comments:			Comments:		

P&A Mangers Signature: \_\_\_\_\_

VP Operations Signature: \_\_\_\_\_



Company Name: Anschutz Corp.

Company Man: Terry Cunningham

Today's Date: 9/11/2016

AFE or Project #: \_\_\_\_\_

Company Man Cell: \_\_\_\_\_

Days on Well: \_\_\_\_\_

Well Name/Number: \_\_\_\_\_

Section/Township/Range: \_\_\_\_\_

Rig #: 34

Tool Pusher: Darie Roehm

Operator: Tony Hernandez

Rig Hand: Byron Benalli

Rig Hand: Leon Hascom

Rig Hand: \_\_\_\_\_

Drive/Hrs	Ride/Hrs	Work/Hrs	Total/Hrs	Per Diem
1		6	7	yes
	1	6	7	yes
5.5		0	5.5	yes
	5.5	0	5.5	yes



Task Times:		Job Steps "In Scope"	Task Times:	Job Steps "Out of Bid Scope"
10:00	3:30	Crew Travel		
10:00	11:00	Pick up supplies for equip.		
11:00	11:30	Travel		
11:30	1:30	Finish moving some equip. to staging area		
1:30	4:00	Take DOT stickers off of 2 of the semi trucke-take hydraulic pump off of pump & air ram for hydromatic off to be fixed on days off		
4:00	4:30	Secure equip.		
4:30	5:00	Travel		
Comments:			Comments:	

P&A Mangers Signature: \_\_\_\_\_

VP Operations Signature: \_\_\_\_\_

Company Name: Anschutz Corp.

Company Man: Terry Cunningham

Today's Date: 9/6/2016

AFE or Project #: \_\_\_\_\_

Company Man Cell: \_\_\_\_\_

Days on Well: 6 & 1

Well Name/Number: AR 34-1 & 4-1

Section/Township/Range: \_\_\_\_\_

Rig #: 34

Tool Pusher: Darie Roehm

Operator: Tony Hernandez

Rig Hand: Byron Benalli

Rig Hand: Leon Hascom

Rig Hand: \_\_\_\_\_

Drive/Hrs	Ride/Hrs	Work/Hrs	Total/Hrs	Per Diem
1		11.5	12.5	yes
1		11.5	12.5	yes
	1	11.5	12.5	yes
	1	11.5	12.5	yes



Task Times:		Job Steps "In Scope"	Task Times:		Job Steps "Out of Bid Scope"
6:00	6:30	Travel			
6:30	7:00	JSA meeting			
7:00	8:30	Rig down-move rig to next location			
8:30	11:00	Wait for base beam & tanks-prep WH			
11:00	12:00	Spot in & rig up			
12:00	2:00	4 bolt & blow well down-lunch			
2:00	5:30	Pump kill on well-Nd WH-Nu BOP-Ru floor-pull hanger-work stuck tbg			
5:30	6:00	Shut well in-secure equip. & location			
6:00	6:30	Travel			
Comments: Ru WL-Free point & cut tbg-TOOH			Comments:		

P&A Mangers Signature: \_\_\_\_\_

VP Operations Signature: \_\_\_\_\_

Company Name: Anschutz Corp.

Company Man: Terry Cunningham

Today's Date: 9/5/2016

AFE or Project #: \_\_\_\_\_

Company Man Cell: \_\_\_\_\_

Days on Well: 5

Well Name/Number: AR 34-1

Section/Township/Range: \_\_\_\_\_

Rig #: 34

Tool Pusher: Darie Roehm

Operator: Tony Hernandez

Rig Hand: Byron Benalli

Rig Hand: Leon Hascom

Rig Hand: \_\_\_\_\_

Drive/Hrs	Ride/Hrs	Work/Hrs	Total/Hrs	Per Diem
1		10.5	11.5	yes
	1	10.5	11.5	yes
1		10.5	11.5	yes
	1	10.5	11.5	yes



Task Times:		Job Steps "In Scope"	Task Times:	Job Steps "Out of Bid Scope"
6:00	6:30	Travel		
6:30	7:00	JSA meeting		
7:00	7:50	TIH with stinger		
7:50	8:45	Tag @2204' (72 jts)-space out-establish circ. Up 13 3/8"		
8:45	10:15	Pump cmt (1 bbl FW-200sxs/41 bbls cmt-1 bbl FW-9.5 bbls disp.-sting out-1.5 bbls disp.)(Cmt: 189sxs below-11sxs on top)		
10:15	11:15	Lay down all tbg		
11:15	11:35	Ru WL-RIH & shoot 4 holes @100'-POOH-Rd WL		
11:35	2:00	Rd floor-Nd BOP-Nu WH-load cementer-establish circ.		
2:00	2:30	Pump cmt (65sxs cmt from 100' to surface inside & out)		
2:30	5:00	Rack out out equip.-move some equip. to next location (to windy to rig down)-secure equip. & location		
5:00	5:30	Travel		
Comments: Rig down-move rig to next location-dig out & cut off WH-top well off-weld cap & marker on-backfill-rig up on next well-Nd WH-Nu BOP-Ru floor			Comments:	

P&A Mangers Signature: \_\_\_\_\_

VP Operations Signature: \_\_\_\_\_

Company Name: Anschutz Corp.

Company Man: Terry Cunningham

Today's Date: 9/4/2016

AFE or Project #: \_\_\_\_\_

Company Man Cell: \_\_\_\_\_

Days on Well: 4

Well Name/Number: AR 34-1

Section/Township/Range: \_\_\_\_\_

Rig #: 34

Tool Pusher: Darie Roehm

Operator: Tony Hernandez

Rig Hand: Byron Benalli

Rig Hand: Leon Hascom

Rig Hand: \_\_\_\_\_

Drive/Hrs	Ride/Hrs	Work/Hrs	Total/Hrs	Per Diem
1		12	13	yes
1		12	13	yes
	1	12	13	yes
	1	12	13	yes



Task Times:		Job Steps "In Scope"	Task Times:		Job Steps "Out of Bid Scope"
6:00	6:30	Travel			
6:30	7:00	JSA meeting			
7:00	8:50	TIH with 5.5" CIBP			
8:50	9:00	Set CIBP @5913' (192 jts)			
9:00	9:30	Pump cmt (1 bbl FW-25sxs/5 bbls cmt-1 bbl FW-31 bbls disp.) (Cmt: 5913' to 5688')			
9:30	12:15	Lay down 90 jts-TOOH			
12:15	2:00	Ru WL-RIH & shoot 4 hole @3200'-POOH-establish injection rate of 1.5 bbls a min @400 psi-RIH with 5.5" CICR & set @3150'-POOH-Rd WL			
2:00	3:00	TIH with stinger			
3:00	3:20	Tag @3154' (102 jts)-space out-Ru cmt equip.			
3:20	4:10	Pump cmt (1 bbl FW-125sxs/25 bbls cmt-1 bbl FW-15 bbls disp.-sting out-1.5 bbls disp.)(Cmt: 115sxs below-/10sxs on top)			
4:10	5:00	Lay down 30 jts-TOOH			
5:00	6:30	Ru WL-RIH & shoot 4 holes @2250'-POOH-RIH & set 5.5" CICR @2200'-POOH-Rd WL-shut well in-secure equip. & location			
6:30	7:00	Travel			
Comments:			Comments:		

P&A Mangers Signature: \_\_\_\_\_

VP Operations Signature: \_\_\_\_\_

Company Name: Anschutz Corp.

Company Man: Terry Cunningham

Today's Date: 9/3/2016

AFE or Project #: \_\_\_\_\_

Company Man Cell: \_\_\_\_\_

Days on Well: 3

Well Name/Number: AR 34-1

Section/Township/Range \_\_\_\_\_

Rig #: 34

Tool Pusher: Darie Roehm

Operator: Tony Hernandez

Rig Hand: Byron Benalli

Rig Hand: Leon Hascom

Rig Hand: \_\_\_\_\_

Drive/Hrs	Ride/Hrs	Work/Hrs	Total/Hrs	Per Diem
1		12.5	13.5	yes
1		12.5	13.5	yes
	1	12.5	13.5	yes
	1	12.5	13.5	yes



Task Times:		Job Steps "In Scope"	Task Times:	Job Steps "Out of Bid Scope"
6:00	6:30	Travel		
6:30	7:00	JSA meeting		
7:00	9:20	TIH to 6850' (222 jts)-Ru cmt equip. (PTO on cementer burned up)-run hydraulic hoses to rig to operate cementer		
9:20	9:50	Pump cmt (1 bbl FW-10sxs/2 bbls cmt-1 bbl FW-37 bbls disp.) (Cmt: 6850' to 6760')		
9:50	11:20	Lay down 14 jts-TOOH		
11:20	1:00	TIH with 5.5" CICR		
1:00	4:25	Set CICR @6407' (208 jts)-circ. Well with corrosion inhibitor-pressure test csg to 500 psi for 15 min (good)-sting into retainer & establish injection rate of 2 bbls a min @100 psi		
4:25	5:30	Pump cmt (1 bbl FW-100sxs/20 bbls cmt-1 bbls FW-34 bbls disp.-sting out 1.5 bbls disp.)(Cmt: 90sxs below-10sxs on top)		
5:30	7:00	Lay down 16 jts-TOOH-shut well in-secure equip. & location		
		Travel		
7:00	7:30	Travel		
Comments: TIH with 5.5" CIBP & set @5900'-pump 25sxs cmt on top-TOOH-Ru WL-RIH & shoot 4 holes @3200'-set CICR @3150'-Rd WL-TIH with stinger-pump 125sxs cmt-TOOH			Comments:	

P&A Mangers Signature: \_\_\_\_\_

VP Operations Signature: \_\_\_\_\_

Company Name: Anschutz Corp.

Company Man: Terry Cunningham

Today's Date: 9/2/2016

AFE or Project #: \_\_\_\_\_

Company Man Cell: \_\_\_\_\_

Days on Well: 2

Well Name/Number: AR 43-1 34-1

Section/Township/Range: \_\_\_\_\_

Rig #: 34

Tool Pusher: Darie Roehm

Operator: Tony Hernandez

Rig Hand: Byron Benalli

Rig Hand: Leon Hascom

Rig Hand: \_\_\_\_\_

Drive/Hrs	Ride/Hrs	Work/Hrs	Total/Hrs	Per Diem
1		13	14	yes
1		13	14	yes
	1	13	14	yes
	1	13	14	yes



Task Times:		Job Steps "In Scope"	Task Times:		Job Steps "Out of Bid Scope"
6:00	6:30	Travel			
6:30	7:00	JSA meeting			
7:00	9:00	Blow well down-Ru pump-pump kill on well			
9:00	12:30	TOOH (came out with 204 jts)-lunch			
12:30	3:45	TIH to 6854' (222 jts)			
3:45	5:20	TOOH (came out with 204 jts)-lunch			
5:20	6:45	TIH with 5.5" CIBP			
6:45	7:30	Set CIBP @6850' (222 jts)-TOOH 8 stands (above top perf.)-			
		shut well in-secure equip. & location			
7:30	8:00	Travel			
Comments: TIH-pump 10sxs cmt on top-TOOH-TIH with 5.5" CIBP & set @6400'-pump 100sxs cmt-TOOH-TIH with 5.5" CIBP & set @5900'-pump 25sxs cmt on top-TOOH			Comments:		

P&A Mangers Signature: \_\_\_\_\_

VP Operations Signiture: \_\_\_\_\_



Company : Anschutz 91116  
 Lease : 34-1  
 Strapped : \_\_\_\_\_

JT. NO.	Length	Total	ADD Y/N	JT. NO.	Length	Total	ADD Y/N	JT. NO.	Length	Total	ADD Y/N	JT. NO.	Length	Total	ADD Y/N
141			Y	151			Y	161			Y	171			Y
142	59.80	4376.23	Y	152	61.80	4681.57	Y	162	61.50	4988.52	Y	172	62.52	5299.33	Y
143			Y	153			Y	163			Y	173			Y
144	61.42	4437.65	Y	154	62.65	4744.22	Y	164	62.80	5051.32	Y	174	63.40	5362.73	Y
145			Y	155			Y	165			Y	175			Y
146	61.22	4498.87	Y	156	61.50	4805.72	Y	166	62.30	5113.62	Y	176	59.37	5422.10	Y
147			Y	157			Y	167			Y	177			Y
148	61.10	4559.97	Y	158	57.80	4863.52	Y	168	61.78	5175.40	Y	178	60.35	5482.45	Y
149			Y	159			Y	169			Y	179			Y
150	59.80	4619.77	Y	160	63.50	4927.02	Y	170	61.41	5236.81	Y	180	61.92	5544.37	Y
<b>Total</b>	<b>303.34</b>			<b>Total</b>	<b>307.25</b>			<b>Total</b>	<b>309.79</b>			<b>JT.</b>	<b>307.56</b>		

JT. NO.	Length	Total	ADD Y/N	JT. NO.	Length	Total	ADD Y/N	JT. NO.	Length	Total	ADD Y/N	JT. NO.	Length	Total	ADD Y/N
181			Y	191			Y	201			Y	211	31.47	6503.71	Y
182	62.62	5606.99	Y	192	59.38	5913.30	Y	202	59.41	6218.45	Y	212	31.56	6535.27	Y
183			Y	193			Y	203			Y	213	31.38	6566.65	Y
184	61.03	5668.02	Y	194	63.40	5976.70	Y	204	62.95	6281.40	Y	214	31.52	6598.17	Y
185			Y	195			Y	205	30.98	6312.38	Y	215	31.53	6629.70	Y
186	61.45	5729.47	Y	196	59.50	6036.20	Y	206	31.00	6343.38	Y	216	31.46	6661.16	Y
187			Y	197			Y	207	32.75	6376.13	Y	217	31.52	6692.68	Y
188	61.20	5790.67	Y	198	61.38	6097.58	Y	208	30.93	6407.06	Y	218	31.54	6724.22	Y
189			Y	199			Y	209	32.56	6439.62	Y	219	33.35	6757.57	Y
190	63.25	5853.92	Y	200	61.46	6159.04	Y	210	32.62	6472.24	Y	220	31.52	6789.09	Y
<b>Total</b>	<b>309.55</b>			<b>Total</b>	<b>305.12</b>			<b>Total</b>	<b>313.20</b>			<b>Total</b>	<b>316.85</b>		

JT. NO.	Length	Total	ADD Y/N	JT. NO.	Length	Total	ADD Y/N	JT. NO.	Length	Total	ADD Y/N	JT. NO.	Length	Total	ADD Y/N
221	31.50	6820.59	Y	231			Y	241			Y	251			Y
222	30.95	6851.54	Y	232			Y	242			Y	252			Y
223	30.72	6882.26	Y	233			Y	243			Y	253			Y
224			Y	234			Y	244			Y	254			Y
225			Y	235			Y	245			Y	255			Y
226			Y	236			Y	246			Y	256			Y
227			Y	237			Y	247			Y	257			Y
228			Y	238			Y	248			Y	258			Y
229			Y	239			Y	249			Y	259			Y
230			Y	240			Y	250			Y	260			Y
<b>Total</b>	<b>93.17</b>			<b>Total</b>				<b>Total</b>				<b>Total</b>			

JT. NO.	Length	Total	ADD Y/N	JT. NO.	Length	Total	ADD Y/N	JT. NO.	Length	Total	ADD Y/N	JT. NO.	Length	Total	ADD Y/N
261			Y	271			Y	281			Y	291			Y
262			Y	272			Y	282			Y	292			Y
263			Y	273			Y	283			Y	293			Y
264			Y	274			Y	284			Y	294			Y
265			Y	275			Y	285			Y	295			Y
266			Y	276			Y	286			Y	296			Y
267			Y	277			Y	287			Y	297			Y
268			Y	278			Y	288			Y	298			Y
269			Y	279			Y	289			Y	299			Y
270			Y	280			Y	290			Y	300			Y
<b>Total</b>				<b>Total</b>				<b>Total</b>				<b>Total</b>			

Company : \_\_\_\_\_  
 Lease : \_\_\_\_\_  
 Strapped : \_\_\_\_\_



Lisha Cordova <lishacordova@utah.gov>

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## Fwd: Fw: AR 34-1 REVISED PROCEDURE

1 message

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**Dan Jarvis** <danjarvis@utah.gov>

Fri, Sep 2, 2016 at 9:42 AM

To: azoilguy@yahoo.com, Lisha Cordova <lishacordova@utah.gov>

Terry

The requested changes to the procedure at Step 7 is approved along with water with inhibitors.

----- Forwarded message -----

From: **Lisha Cordova** <lishacordova@utah.gov>

Date: Fri, Sep 2, 2016 at 9:27 AM

Subject: Fwd: Fw: AR 34-1 REVISED PROCEDURE

To: Dustin Doucet <dustindoucet@utah.gov>

Cc: Dan Jarvis <danjarvis@utah.gov>

Hi Dustin,

Did you approve the attached change? Want more than 5 sxs on top of CIBP set & 6850'?

----- Forwarded message -----

From: **Terry Cunningham** <azoilguy@yahoo.com>

Date: Fri, Sep 2, 2016 at 8:48 AM

Subject: Fw: AR 34-1 REVISED PROCEDURE

To: "lishacordova@utah.gov" <lishacordova@utah.gov>

Here is the change, it is step 7.

I wanted to talk to Dustin about possibly changing the mud to water w/ inhibitors. I think the mud was intended for well control, but it's not needed.

Sent from Yahoo Mail on Android

On Thu, Sep 1, 2016 at 6:46, Galen Brenize

<Galen.Brenize@aec-denver.com> wrote:

All:

Pls see attached a revised procedure for the AR 34-1.

The ONLY CHANGE IS STEP 7.

Instead of a blanking plug in the packer, we will set a CIBP just above the packer and dump bail 5 sx on top.

RE: Magna does not have the capability to set a blanking plug. They can set the CIBP, which will give a seal above the packer/TP, as this was the intent of the blanking plug.

Magna is aware, and we will discuss this change in the mtg today.

G

RECEIVED

SEP 02 2016

DIV. OF OIL, GAS & MINING

THE ANSCHUTZ CORPORATION  
Anschutz Ranch 34-1  
SWSE, 1949' FSL & 1923' FEL, Sec. 34-4N-7E  
Summit Co., UT  
API # 49-043-30076

**PLUG AND ABANDON PROCEDURE**

Pertinent Data Sheet

**Field:** **Elevation:** 7754'GL/7768'KB **ID:** 8,190' TVD  
**Spud Date:** 5/29/1978 **Rig:** **PBTD:** 7,820' TVD  
**BHT:** 136°F (3/27/2007 Temp Log run from 6850'-6100')

**CASING PROGRAM:**

<u>Hole Size</u>	<u>Csg Size</u>	<u>Wt. &amp; Grade</u>	<u>Depth Set</u>	<u>Cement</u>	<u>TOC</u>
	20"		0-120'		Surface
17.5"	13.375"	54&61# J-55,LTC	0-2200'	? sx	Surface
7.75"	5.5"	15.5,17&20# var	0'-7828'	1050 sx	5,804' (CBL)

**Tubular:** 5-1/2" 15.5 K-55 – Burst: 4,810 psi (100%), 2,886 psi (60%); Collapse: 4,040 psi (100%); ID – 4.950"; Drift ID – 4.825", Capacity: 0.0238 bbls/ft  
5-1/2" 17# K-55 - Burst: 5,320 psi (100%), 3,192 psi (60%); Collapse: 4,910 psi (100%); ID – 4.892"; Drift ID – 4.767", Capacity: 0.0232 bbls/ft  
5-1/2" 20# P-110 – Burst: 12,640 psi (100%), 7,584 psi (60%); Collapse: 11,080 psi (100%); ID – 4.778"; Drift ID – 4.653", Capacity: 0.0221 bbls/ft  
2-7/8" 6.5# N-80 – Burst: 15,000 psi (100%); Capacity: 0.00579 bbls/ft

**Wellhead:** 7-1/16" 5M

**All Depths KB (unless noted otherwise)**

1. Ensure guy-wire anchors have up to date certifications.
2. MIRU pulling unit and equipment (mud tank, frac tank, work fluid).
3. Check and record well pressures. 2-7/8" tbg. 2-7/8" x 5-1/2" annulus and 5-1/2" x 13-3/8" annulus.
4. Kill well with 75 bbls of 9.8 ppg mud.
5. ND wellhead. NU 5K BOP. Pressure test.
6. Release ArrowSet X-1 packer (set in 8K# compression) with 1 turn to the right at packer. Allow well to equalize. POOH with 2-7/8", 6.5#, N-80 8rd EUE tubing and packer. Kill well as needed with mud. LD packer.
7. RU wireline and run gauge ring to top of Baker FB-1 packer at 6,860'. RIH and set CIBP at @ 6850', and dump 5 sacks of cement on top of CIBP for a 50' cement top.

8. Wireline set CICR at ~6,400' (avoid collars). Pressure test retainer.
9. RIH with 2-7/8" tubing and stinger and sting into CICR
10. Mix and pump 100 sacks of 15.8 ppg neat Class G cement (1.15 cuft/sk). Pump 90 sacks below retainer, sting out and pump 11 sacks (100') on top of retainer for a top of cement at 6,300'. Calculated water flush volume for balanced plug on top of CICR is ~ 36 bbls. PU 1 joint above TOC and reverse out 1.5 tbg volumes (~55 bbls) or until returns are clear.
11. Fill hole as needed with 9.8 ppg mud.
12. Pressure test casing to 500 psi for 15 mins, document results. Release pressure.
13. RIH with 5-1/2" (15.5#) CIBP and set at 5,900'. Place and dump 25 sacks (200' of cement on top).  
POOH.
14. Perforate for squeeze at 3,200' with a minimum of 4 holes. RD wireline.
15. Establish injection down casing. Leaving 5-1/2" x 13-3/8" annulus open.
16. Wireline set CICR at ~3,150'. Pressure test retainer. Sting into retainer.
17. RIH with 2-7/8" tubing and stinger and sting into CICR
18. Mix and pump 125 sacks of 15.8 ppg neat Class G cement. Pump 114 sacks below retainer, sting out and pump 11 sacks on top of retainer for a top of cement at 3,050'. Calculated water flush volume for balanced plug on top of CICR is ~ 17.4 bbls. PU 1 joint above TOC and reverse out 1.5 tbg volumes (~26 bbls) or until returns are clear.
19. Perforate for squeeze at 2,250' with a minimum of 4 holes. RD wireline.
20. Establish injection down casing. Leaving 5-1/2" x 13-3/8" annulus open.
21. Wireline set CICR at ~3,150'. Pressure test retainer. Sting into retainer.
22. RIH with 2-7/8" tubing and stinger and sting into CICR.
23. Mix and pump 200 sacks of 15.8 ppg neat Class G cement. Pump 189 sacks below retainer, sting out and pump 11 sacks on top of retainer for a top of cement at 2,100'. Calculated water flush volume for balanced plug on top of CICR is ~ 11.9 bbls. PU 1 joint above TOC and reverse out 1.5 tbg volumes (~18 bbls) or until returns are clear.
24. POOH with tubing.
25. Casing punch 5-1/2" casing at 100'.
26. Mix and pump down 5-1/2" casing with 70 sacks of 15.8 ppg cement.
27. ND BOP. Cut wellhead 3' below surface.
28. Run 1" string between 5-1/2" x 13-3/8" annulus and pump cement to surface.
29. Top off 5-1/2" casing with cement.
30. Weld and cap well. Permanent monument installed showing the API#, well name & number, P&A date, and operator. Pipe used not less than 4" in diameter and lot less than 10' in length embedded in cement.

31. GPS location for final verification.

32. Reclaim location per requirements.



Lisha Cordova &lt;lishacordova@utah.gov&gt;

## Anschutz Ranch P&A Timing

1 message

**Ryan Calhoun** <Ryan.Calhoun@aec-denver.com>

Thu, Aug 25, 2016 at 4:57 AM

To: "lishacordova@utah.gov" <lishacordova@utah.gov>

Cc: Mark Amundson <Mark.Amundson@aec-denver.com>, Terry Cunningham <azoilguy@yahoo.com>, Brant Gimmeson <Brant.Gimmeson@aec-denver.com>, Allison Hahn <Allison.Hahn@aec-denver.com>

Lisha,

The latest scheduling update we just received for the rig has them finishing up their current project today or tomorrow and planning to move to our location next Tuesday. Terry Cunningham will be our wellsite leader and his contact information is attached. I am heading out on vacation today and returning 9/1. Mark Amundson will be covering for me in the meantime. His contact info is also attached. Thanks!

<p><b>Terry Cunningham</b> EPI Consultants Field Supervisor</p> <p>(863) 860-6612 Mobile azoilguy@yahoo.com</p>	<p><b>Mark Amundson</b> AEC Drilling Manager AEC 303-299-1231 Work (720) 708-0709 Mobile (720) 951-2696 Home Mark.Amundson@AEC-Denver.com Denver, CO 80202</p>
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**Ryan Calhoun**

Anschutz Exploration Corporation

303.299.1584 (office) | 303.710.1713 (cell)

Ryan.Calhoun@aec-denver.com

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### 2 attachments

 **Terry Cunningham.vcf**  
2K

 **Mark Amundson.vcf**  
2K

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> FEE
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.		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>1. TYPE OF WELL</b> Gas Well	<b>8. WELL NAME and NUMBER:</b> ANSCHUTZ RANCH 34-1	
<b>2. NAME OF OPERATOR:</b> ANSCHUTZ CORPORATION, THE	<b>9. API NUMBER:</b> 43043300760000	
<b>3. ADDRESS OF OPERATOR:</b> 555 17th Street Suite 2400 , Denver , CO, 80202	<b>PHONE NUMBER:</b> 303 298-1000 Ext	<b>9. FIELD and POOL or WILDCAT:</b> ANSCHUTZ RANCH
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1947 FSL 1994 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSE Section: 34 Township: 04.0N Range: 07.0E Meridian: S	<b>COUNTY:</b> SUMMIT	
	<b>STATE:</b> UTAH	
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:  <input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 9/13/2016  <input type="checkbox"/> SPUD REPORT Date of Spud:  <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> DEEPEN <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> OPERATOR CHANGE <input checked="" type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> OTHER	
		OTHER: <input style="width: 100px;" type="text"/>
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
<p>The Anschutz Corporation in partnership with Magna Energy Services plugged the Anschutz Ranch 34-1 on 9/13/2016. Please see attachments for Magna Energy Services post job report.</p>		<p><b>Accepted by the Utah Division of Oil, Gas and Mining</b></p> <p><b>FOR RECORD ONLY</b></p> <p>February 14, 2017</p>
<b>NAME (PLEASE PRINT)</b> Monica Stoeber	<b>PHONE NUMBER</b> 303 299-1243	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 2/14/2017	

**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:		
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____		8. WELL NAME and NUMBER: <b>Anschutz Ranch 34-1</b>
2. NAME OF OPERATOR: <b>Anschutz Corporation, The</b>		9. API NUMBER: <b>4304330076</b>
3. ADDRESS OF OPERATOR: 555 17th Street, Suite 2400 CITY Denver STATE CO ZIP 80202		10. FIELD AND POOL, OR WILDCAT: <b>Undesignated</b>
4. LOCATION OF WELL FOOTAGES AT SURFACE: <b>1949 FSL 1923' FEL</b>		COUNTY: <b>Summit</b>
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>NWSE 34 4N 7E</b>		STATE: <b>UTAH</b>

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> DEEPEN <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> OPERATOR CHANGE <input checked="" type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> PLUG BACK <input type="checkbox"/> PRODUCTION (START/RESUME) <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	<input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> TEMPORARILY ABANDON <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> WATER SHUT-OFF <input type="checkbox"/> OTHER: _____
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of work completion: <b>9/13/2016</b>			

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

The Anschutz Corporation in partnership with Magna Energy Services plugged the Anschutz Ranch 34-1 on 9/13/2016. Please see attachments for Magna Energy Services post job report.

NAME (PLEASE PRINT) <u>Randy Maxey</u>	TITLE <u>Permitting and Regulatory Manager</u>
SIGNATURE <u></u>	DATE <u>2/14/2017</u>

(This space for State use only)

**JOB LOG**

Magna Energy Services  
20661 Niobrara Blvd.  
LaSalle, Colorado 80645

**Operator: Anschutz Corporation**  
**Well: AR 4-1**  
**Legal: Sec. 4 T:4N R:7E SWSE**  
**Location: Summit County, UT**  
**AFE:**

**API: 43-043-30121**

**Date: 9-6-16: to 9-13-16**

9-6-16: MIRU-NDWH-NUBOP-SDFN

9-7-16: Ru WL-RIH with free point tool (free @5600'-could not get past 5624' inside tbg)-POOH-RIH with jet cutter & cut tbg @5613'-POOH-Rd WL-TOOH-TIH kill string-SDFN

9-8-16: TOOH-Ru WL-RIH with JBGR to (stacked out)-POOH-RIH with 5.5" CICR & set @5560'-POOH-Rd WL-TIH with stinger-tag CICR @5563'-circulate well with corrosion inhibitor-pressure test csg to 500 psi for 15 min. (good)-sting into retainer & establish injection (2 bbls @100 psi)-pump 226sxs cmt (215sxs below/11sxs on top) TOOH-Ru WL-RIH & shoot 4 holes @3000'-POOH-establish injection rate-RIH with 5.5" CICR & set @2940'-POOH-Rd WL-SDFN

9-9-16: TIH with stinger-sting into retainer-pump 125sxs cmt (114sxs below/11sxs on top)-TOOH-Ru WL-RIH & shoot 4 holes @1919'-POOH-establish injection rate-RIH with 5.5" CICR & set @1874'-POOH-Rd WL-TIH with stinger-sting into retainer-pump 150sxs cmt (139sxs below/11sxs on top)-TOOH-Ru WL-RIH & shoot 4 holes @100'-POOH-Rd WL-establish circulation up 9 5/8"-Rd floor-NDBOP-NUWH-pump 35sxs cmt (100' to surface inside & out)-SDFN

9-10-16: Rig down

9-13-16: Dig out & cut off WH-top well off with 5sxs cmt-weld cap & marker on-backfill-P&A complete

\*\*\*\*\*All cement used is class "G" neat, 15.8ppg, 1.15 yield \*\*\*\*\*

**Wireline Contractor: Magna Wireline of Gillette, WY**  
**Cement Contractor: Magna Energy Services of LaSalle, CO**  
**Field Supervision: Darie Roehm**  
**Company Representative: Terry Cunningham**  
**State or BLM Representative: Lisha Cordova**