

TerraTek
Core Services, Inc.®

ARCO Exploration Company
Rocky Ford No. 1 Well
Piute County, Utah

TTCS File No. 85111

<u>Core No.</u>	<u>Interval</u>	<u>Formation</u>
1	8999 - 9014	Kaibab

RECEIVED

MAR 20 1965

**DIVISION OF OIL
& GAS MINING**

TerraTek Core Services, Inc.®

University Research Park - 360 Wakara Way - Salt Lake City, Utah 84108 - (801) 584-2480 - TWX 910-925-5284

ARCO EXPLORATION COMPANY

Well: Rocky Ford #1
 Field: Wildcat
 Drilling Fluid: Water Base

State: Utah
 County: Piute
 Location: Sec. 27-T30S-R3W

Date: 14 Dec 1984
 TTCS File #: 85111
 Elevation: 7258 KB

RETORT ANALYSIS - BOYLE'S LAW POROSITY

Sample Number	Depth (feet)	Permeability Horz (md)	Porosity (%)	Saturation		Grain Density (gm/cc)	Lithology
				Oil (%)	H2O (%)		
KAIBAB FORMATION							
1	8999.0-00.0	<0.01	3.1	0.0	97.2	2.77	Sd,fg,dol,sl/pyr
2	9000.0-01.0	0.74+	4.7	0.0	71.5	2.79	Sd,fg,dol,sl/pyr,fis
3	9001.0-02.0	0.97+	4.9	0.0	74.4	2.81	Sd,fg,dol,sl/pyr,fis
	9002.0 - 9003.0						Too Broken for Analysis
4	9003.0-04.0	0.01	3.8	0.0	84.3	2.76	Sd,fg,dol,sl/pyr
5	9004.0-05.0	0.05	10.4	0.0	93.9	2.73	Sd,fg,slty,dol
6	9005.0-06.0	0.31	15.6	0.0	85.3	2.70	Sd,fg,slty,dol,sl/shy
7	9006.0-07.0	0.08	13.3	0.0	92.6	2.72	Sd,fg,slty,dol,sl/shy
8	9007.0-08.0	0.12	13.1	0.0	95.6	2.73	Sd,fg,slty,dol,cong
	9008.0 - 9009.0						Sd,fg,dol,sl/shy,Too Broken for Analysis
	9009.0 - 9014.0						Not recovered

+ Horizontal dehydration crack

TerraTek

Core Services, Inc.®

December 14, 1984

ARCO Exploration Company
P.O. Box 5540
Denver, CO 80217

Attention: Mr. Gordon Wise

Subject: Core Analysis Data; Rocky Ford No. 1 Well; Piute County,
Utah; TTCS File No. 85111

Gentlemen:

Diamond coring equipment and water base mud were used to obtain 4.0-inch diameter cores from the formations and intervals shown on the preceding page in the subject well. A representative of Terra Tek Core Services received the cores at the well-site where they were boxed (unpreserved) and transported to our Salt Lake City laboratory for routine retort analysis as instructed.

A core gamma log was recorded and, along with porosity, permeability grain density and fluid saturation plots, is shown on the enclosed Teklog.

Residual fluid removal was accomplished by the controlled temperature retort extraction method on 100-gram crushed samples. Porosities were determined by Boyle's law (helium) grain volumes and Archimedes (mercury) bulk volumes, on one-inch diameter plug samples. Horizontal permeabilities to nitrogen were measured on these same plugs in a Hassler sleeve using an orifice manometer and traveling meniscus to monitor downstream flow.

Data resulting from the above analysis is tabulated on page one followed by a summary reflecting average data by zones based on permeability, porosity and fluid saturation variations.

Page 2

Rocky Ford No. Well; TTCS File No. 85111

As instructed cores have been slabbed and both slab and butt segments shipped to your Denver warehouse, 11809 East 51st Avenue.

We sincerely appreciate this opportunity to be of service.

Very truly yours,

Jack R. Good

Jack R. Good

Laboratory Director

14 copies to addressee

JRG/cy

TerraTek Core Services, Inc.®

University Research Park - 360 Wakara Way - Salt Lake City, Utah 84108 - (801) 584-2480 - TWX 910-925-5284

ARCO EXPLORATION COMPANY

Well: Rocky Ford #1
Field: Wildcat
Drillings Fluid: Water Base

State: Utah
County: Piute
Location: Sec. 27-T30S-R3W

Date: 14 Dec 1984
TTCS File #: 85111
Elevation: 7258 KB

RETORT ANALYSIS - BOYLE'S LAW POROSITY DATA SUMMARY

Zone Number	Depth Interval (feet)	Number of samples	Permeability of Horz (md)	Porosity (%)	Saturation		Grain Density (gm/cc)
					Oil (%)	H2O (%)	

KAIBAB FORMATION

1	8999.0-004.0	4	<0.01 [0.00]	4.1 [0.8]	0.0 [0.0]	81.9 [11.6]	2.78 [0.0]
2	9004.0-008.0	4	0.14 [0.12]	13.1 [2.1]	0.0 [0.0]	91.9 [4.5]	2.72 [0.0]

[] Sample standard deviation

TerraTek Core Services, Inc.®

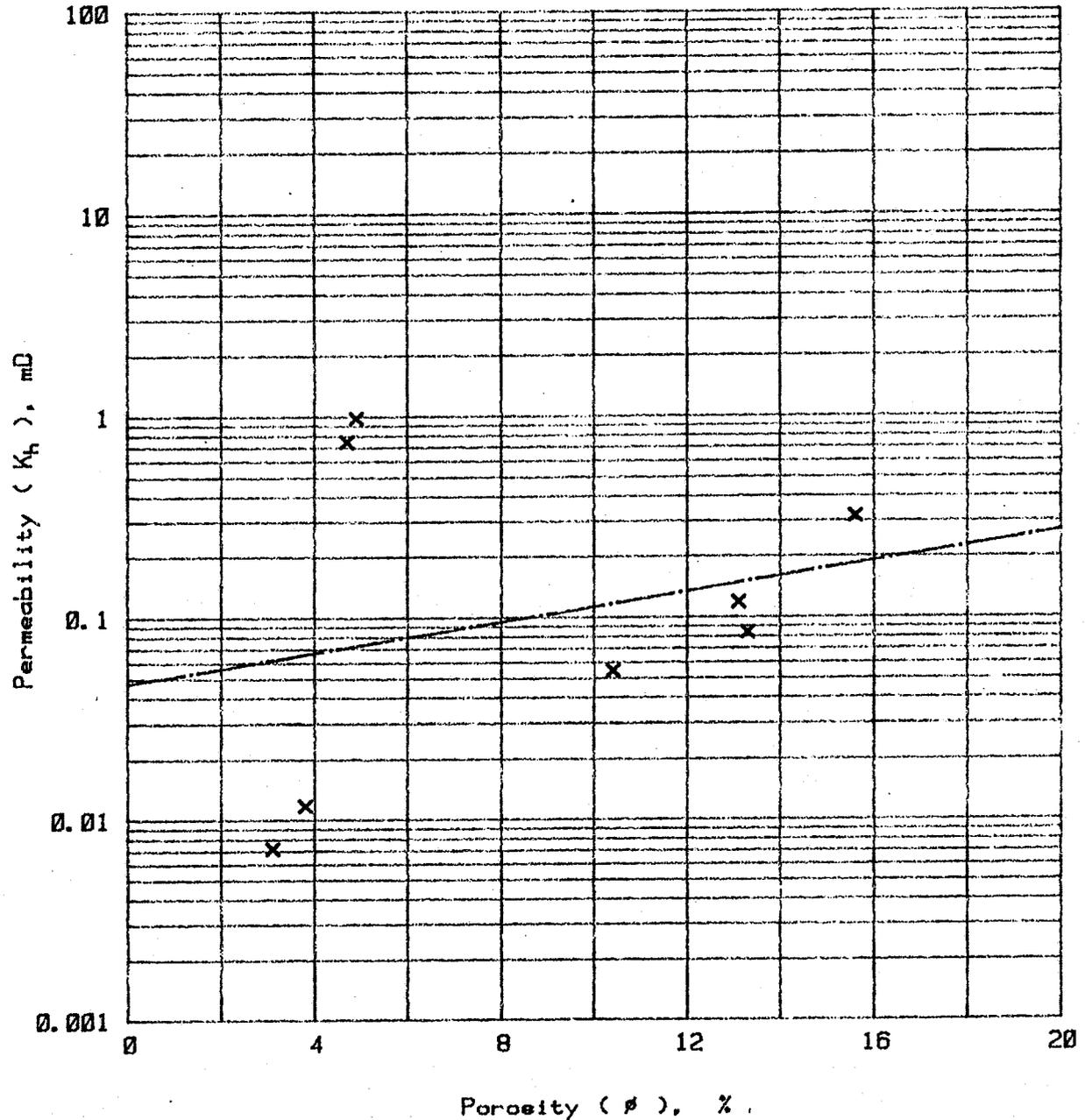
University Research Park - 360 Wakara Way - Salt Lake City, Utah 84108 - (801) 584-2480 - TWX 910-925-5284

HORIZONTAL PERMEABILITY VS POROSITY

ARCO EXPLORATION COMPANY

Rocky Ford #1
Wildcat Field
Piute County, Utah
14 Dec 1984

Depth Interval : 8999 to 9014 feet		
Permeability (K_h), mD		
Min 0.01	Max 0.07	Geo. Ave 0.10
Porosity (ϕ), %		
Min 3.1	Max 15.6	Average 8.6
Equation of the Line		
Log K_h = Slope ϕ + Log of Intercept		
Log K_h = .038 ϕ - 1.3277		
Correlation Coefficient : .245		



UNITED STATES
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

~~CONFIDENTIAL~~

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
 ARCO Oil and Gas Company,
 a Division of Atlantic Richfield Company

3. ADDRESS OF OPERATOR
 P. O. Box 5540, Denver, Colorado 80217

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements*)
 At surface 2030' FSL & 1645' FWL, Sec. 27-T30S-R3W
 At proposed prod. zone

5. LEASE DESIGNATION
 U-26805

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
 Rocky Ford

9. WELL NO.
 1

10. FIELD AND POOL, OR WILDCAT
 Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 27-30S-3W

12. COUNTY OR PARISH
 Piute

13. STATE
 Utah

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 Approx 2-1/2 miles south of Kingston, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)
 1645' lease

16. NO. OF ACRES IN LEASE
 2560

17. NO. OF ACRES ASSIGNED TO THIS WELL
 NOT ASSIGNED

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
 NONE

19. PROPOSED DEPTH
 11,700'

20. ROTARY OR CABLE TOOLS
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 7236' GR

22. APPROX. DATE WORK WILL START*
 July 15, 1984

NE 1/4 SW 1/4

TOROWEAR

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
36"	30"	196#	150'	450 sx to surface
26"	16"	65#	1250' ✓	1340 sx to surface
14-3/4"	10-3/4"	55.5# & 65.7#	7100'	3365 sx (2 stage) ✓
9-1/2"	5-1/2"	17#	11700'	1200 sx

Propose to drill a well to 11,700' to test Permian age formations as described in the attached plans.

Pursuant to NTL-6, attachments are as follows:
 Certified Location Plat
 Drilling Plan with attachments
 Surface Use Plan with attachments.

RECEIVED

MAY 2 1984

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

DIVISION OF OIL
 GAS & MINING

DATE 3/10/84
 BY: [Signature]

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

24. SIGNED [Signature] TITLE Operations Manager DATE 30 April 1984
 (This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

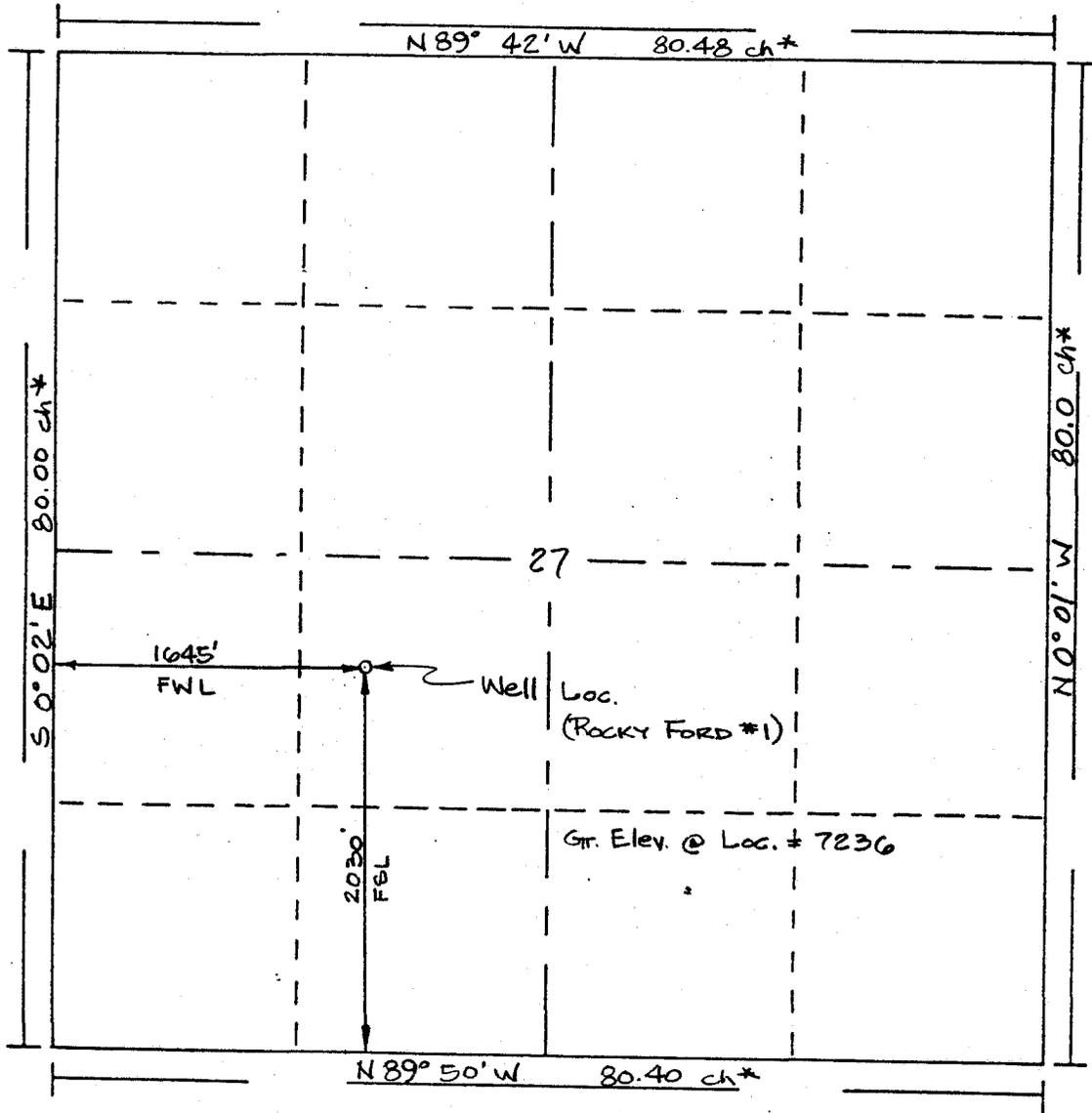
APPROVED BY _____ TITLE _____ DATE _____
 CONDITIONS OF APPROVAL, IF ANY :



FORM F-106

* Record GLO plat 1899

R. 3 W



T. 30 S.

Scale... 1" = 1000'

Powers Elevation of Denver, Colorado has in accordance with a request from SUZANNE BARNES for ARCO OIL & GAS Co. determined the location of ROCKY FORD #1 (TABLE MTN. PROD.) to be 2030' FSL & 1645' FWL of Section 27 Township 30 South Range 3 West of the SALT LAKE Meridian PLUTE County, UTAH

I hereby certify that this plat is an accurate representation of a correct survey showing the location of

Date: MARCH 28, 1984

J. Nelson
 Licensed Land Surveyor No. 2711
 State of UTAH

SURFACE USE PLAN

Attach to APD form 9-331-C
ARCO Oil and Gas Company
Well: Rocky Ford #1
2030'FSL & 1645'FWL
Section 27-T30S-R3W
Piute County, Utah

1. Existing Roads

- A. The proposed well is located approximately 3 miles south of Kingston, Utah. The location is reached from Kingston as shown in Exhibit "B". Access is via State Hwy 62 west out of Kingston to County Rd #89014, which is approximately 1/2 mile, turn south on County Road for approximately 2 miles to point of turnoff of newly constructed access.
- B. The county road to be used is gravel. Improvement of this existing road will not be necessary. Maintenance will be completed as is necessary.

2. Access Roads to be Constructed

New road construction will be in compliance with the access route survey profile as completed by Power's Elevation as is shown in Exhibits "C" and "C-1" through "C-4" and will also be subject to the following stipulations:

- A. The width of the newly constructed access will be 18'.
- B. The maximum grade is 15.1%. The grades of the entire construction are shown in the Road Profile attached as Exhibits "C-1" through "C-4".
- C. Cuts and fills have also been visualized in the Road Profile shown as Exhibits "C-1" through "C-4".
- D. Turnouts are planned at all curves where the turning radius is less than 115 feet.
- E. The drainage design will be in compliance with Class III road standards.
- F. A 36" culvert will be installed where new construction crosses drainage.
- G. No fence cuts or cattleguards will be required.
- H. Gravel will be used on this new construction as is necessary for maintenance and to prevent deep rutting and erosion.
- I. Trees on route will be disposed of by chipping (for trees less than 3 inches in diameter). The wood chips should be used for mulch, slope erosion control or stockpiled to be used for reclamation work upon abandonment of the well.
- J. Vehicular traffic and surface disturbance will be limited to the approved access route and approved location.

8. Anticipated Starting Date and Duration of Operations

A critical spud date of July 31, 1984 exists due to a lease expiration. The anticipated spud date is July 15, 1984. Drilling and evaluation operations should be completed in approximately 145 days with completion operations anticipated at 25 days.

5. Type and Characteristic of Proposed Drilling Fluids:

<u>Depth</u>	<u>Type</u>	<u>Weight #/gal.</u>	<u>Visc. sec/qt.</u>	<u>Fluid Loss cc</u>
0-1250'	Fresh H ₂ O spud mud	8.7-8.9	±50	No control
1250-6200'	Low lime spud mud	8.6-9.0	±40	±15
6200-7100'	Salt saturated	8.8-9.7	±40	±15
7100-TD	*Fresh water dispersed	8.6-8.8	±30	±10

A mud logging unit with gas detecting device will be monitoring the system from surface to TD.

*May use air, aerated mud, mist or foam drilling fluid in this hole section if lost circulation warrants this.

Note: Mud reserve material will be equal to the active system capacity.

6. Testing, Logging and Coring Programs:

- a. Coring: Anticipate two 60' cores within the Sinbad or Kaibab formations or as deemed necessary
- b. DST's Anticipate four DST's within the Kaibab formation or as deemed necessary
- c. Logging Program:

	<u>Open Hole</u>	<u>Cased Hole</u>
FDC/CNL/GR/CAL	Csg. pts to surf.	CBL/VDL/GR/CCL TD-TOC
SP/DIL/DLL	Csg. pts to surf. csg. shoe	
Dipmeter	Csg. pts to surf. csg. shoe	
VSP	TD-surf.	

7. Anticipated Abnormal Temperatures, Pressures or Hazards

No abnormal pressures or temperatures have been noted in wells drilled in the area. The expected bottomhole pressure @ TD is 3800 psi which is indicative of the area being underpressured. Although H₂S gas is not expected to be encountered during this test, H₂S safety equipment will be on location from surface to completion of operations since drilling information in this area is limited. The H₂S contingency plan is being prepared and will be submitted by sundry when completed.

3. Location of Existing Wells

There are no existing wells within a one mile radius of the proposed location.

4. Location of Existing or Proposed Facilities if Well is Productive

There are currently no existing production facilities. If this well is productive, plans for production facilities will be submitted via sundry notice.

5. Location and Type of Water Supply

- A. It is intended to obtain water from the Sevier River at a point along Hwy 62 outside of Kingston. Negotiations are presently being completed to obtain water from Kingston Irrigation Co. When finalized an Application for Temporary Change of Point of Diversion, Place or Purpose of Use will be filed with the State's Water Rights Department. The BLM agency will be informed once final approval is received.
- B. Water will be hauled along the same access route as shown to the location in Exhibit "B".

6. Construction Materials

- A. Pit gravel will be used for surfacing the newly constructed access road, as is necessary for maintenance.
- B. The pit gravel will be obtained and supplied by the construction company contracted the work.

7. Methods for Handling Waste Disposal

The following methods and locations for containment and disposal of waste material will be used.

- A. Drill cuttings will be handled in the reserve pit and buried following completion of drilling.
- B. Garbage, flammable and non-flammable waste will be handled in the trash pit. The trash pit will be totally enclosed with small mesh wire to prevent wind scattering trash before being removed. A permit will be obtained from the area Forester for burning.
- C. A holding tank will be installed to handle wastes created by personnel living at the location. The system will meet and be approved by the local Health District.

- D. Drilling fluids will be handled in the reserve pit.
- E. Any fluids produced during drilling tests or while making production tests will be collected in a test tank. If a test tank is not available during drilling, fluids will be handled in the reserve pit. Any spills of oil, gas, salt water or other noxious fluids will be cleaned up and removed. If well is productive produced water will be disposed of on-site for 30 days. After that time, application will be made for approval of permanent disposal methods.

8. Ancillary Facilities

No air strip, camp or other facilities will be built during drilling of this well. There will be 3 or 4 trailers on the drillsite pad for temporary living facilities.

9. Wellsite Layout

- A. Exhibits C and D are the certified Location Plat and the Drill Pad Layout as staked with respect to topographic features respectively.
- B. Exhibits E and F are cross section diagrams of the location showing cuts and fills in relation to topography.
- C,D,E,F. Exhibit G indicates the orientation of the rig and equipment including the reserve and burn pits, access road onto the pad, turnaround area, pipe racks and mud tanks.
- G. The reserve pit will be lined with a 10 mil PVC liner. A keeway will be trenched on down slope berms if required.
- H. Three sides of the reserve pit will be fenced before drilling starts. The fourth side will be fenced as soon as the drilling is completed. The fence will be kept in good repair while the pit is drying. The fence will be four strands of barbed wire or as is determined adequate by the BLM.

10. Plans for Reclamation of the Surface

- A. If well is abandoned the site will be restored to original condition as nearly as possible. Before any earthwork to restore the location takes place, the reserve pit will be dry and all trash contained in the pit will be removed. Any dispersal of drilling fluids over the drillsite pad will be subject to the approval of the BLM. All disturbed areas will be recontoured to blend as nearly as possible with the surrounding area.
- B. Waste disposals and spoils material will be buried or hauled away immediately to an approved sanitary land fill after drilling is completed.

- C. The stockpiled topsoil will be evenly distributed over the disturbed areas. All disturbed areas will be scarified with the contour to a depth of 8-12 inches. The pad will be left with a roughened surface.
- D. Reseeding will take place during the period of 9/30 to 11/1 or 3/30 to 4/30 and will be repeated until vegetation is successfully established. The seed mix will contain: 2-1/2 lbs/acre Indian Race grass, 1-1/2 lbs/acre Bluebunch Wheat grass, 1-1/2 lbs/acre Squirrel Tail, and 1-1/2-2 lbs/acre Big Sagebrush and White Sagebrush.
- E. After seeding is complete the stockpiled trees will be scattered evenly over the disturbed area and walked down with a dozer.
- F. Upon abandonment of the location all newly constructed routes will be recontoured to the natural topography as nearly as is possible. They will be narrowed where practical, seeded with the above seed mix which will be dragged where practical. Boulders removed during construction will be scattered over the roadbed before narrowing.

11. Surface Ownership

The surface ownership for the wellsite location and newly constructed access road is by the Federal Government.

12. Additional Information

- A. ✓ The state spacing regulation for wildcat wells cannot be complied with because of topographical constraints, as can be seen in the attached topographic map. All oil and gas leases within a 660 foot radius of the proposed location are common to the wellsite location. They are all a 100% ARCO leasehold interest.
- B. An archeological survey of the drillsite pad, access road and surrounding area has been completed by Bill Davis from Abajo Archeology. The survey report is attached as Exhibit "H". If cultural material is exposed during construction, work in that area will stop and the BLM Resource Area Office will be contacted. All employees working in the area will be informed by the operator that they will be subject to prosecution for disturbing archeological sites or picking up artifacts. Salvage or excavation of identified archeological sites will only be done if damage occurs.
- C. The operator will contact the area manager at the Sevier River Resource Area 48 hours prior to any commencement of work on public land.
- D. The dirt contractor will be furnished with an approved copy of the surface use plan and any additional BLM stipulations before beginning any work.

- E. For any questions regarding this permit please contact Suzanne Barnes at (303) 293-1077. If she is not available, please contact Tom Christopher at (303) 293-7077. If neither are available, please contact one of the representatives in item 13.

13. Lessee's or Operator's Representative and Certification

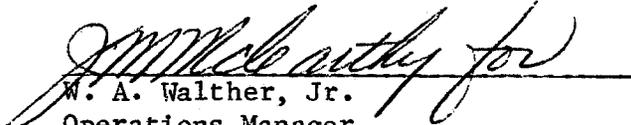
W. A. Walther, Jr.
ARCO Oil and Gas Company
P. O. Box 5540
Denver, Colorado 80217
Bus. Tele: (303) 293-7031
Res. Tele: (303) 293-1342

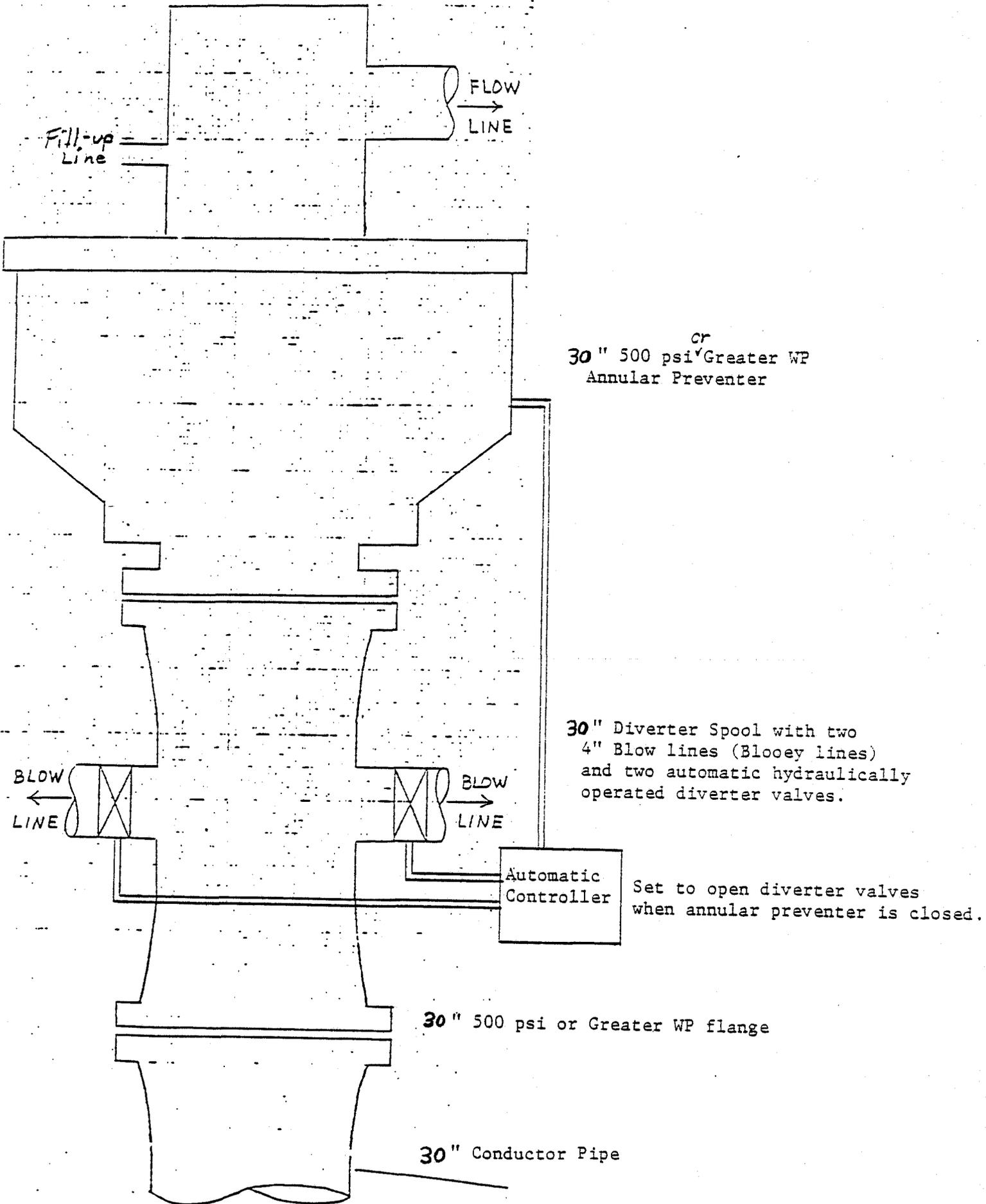
J. M. McCarthy
ARCO Oil and Gas Company
P. O. Box 5540
Denver, Colorado 80217
Bus. Tele: (303) 293-7127
Res. Tele: (303) 293-1339

14. Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by ARCO Oil and Gas Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

30 APRIL 1984
Date


W. A. Walther, Jr.
Operations Manager
ARCO Oil and Gas Company



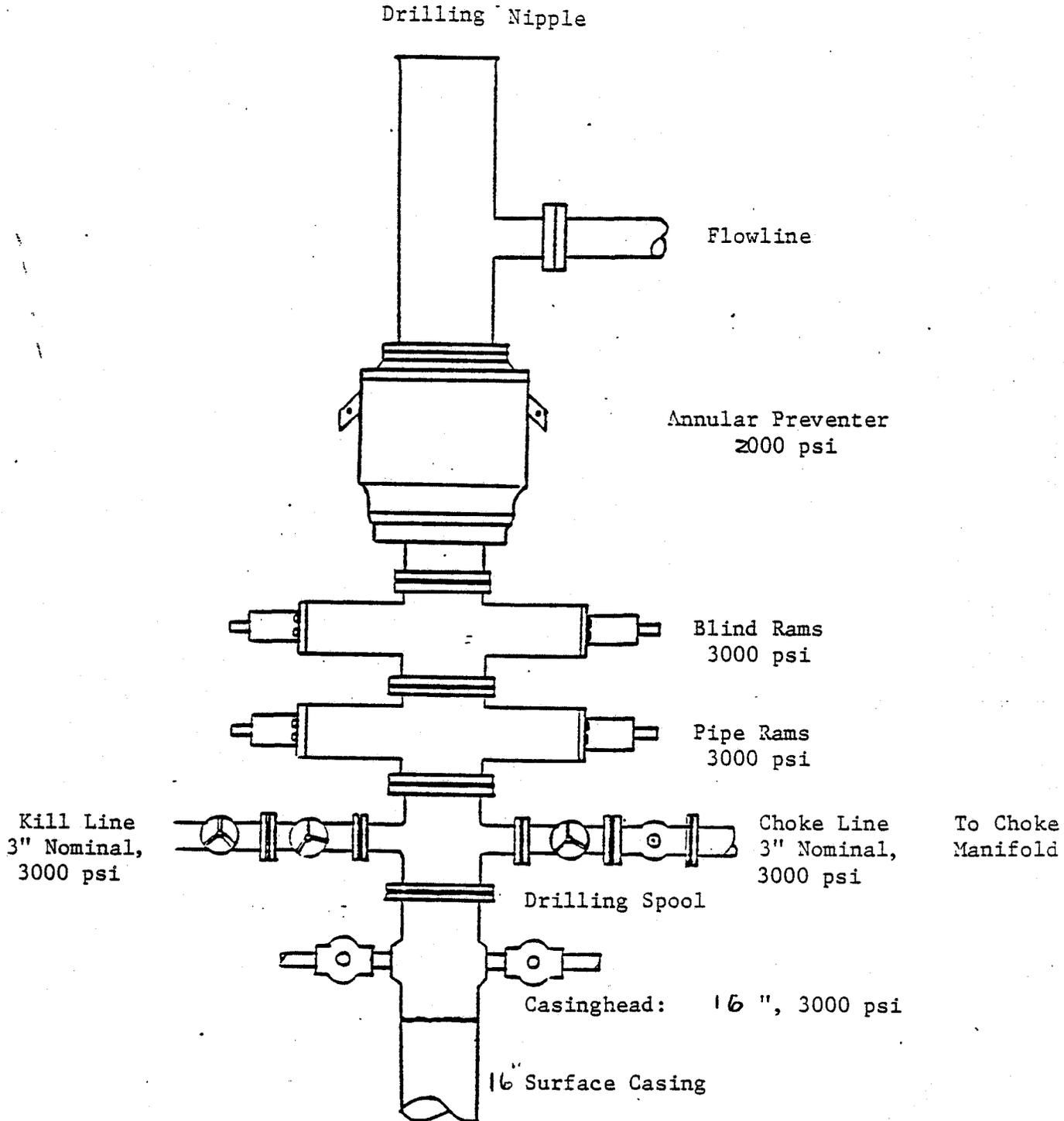
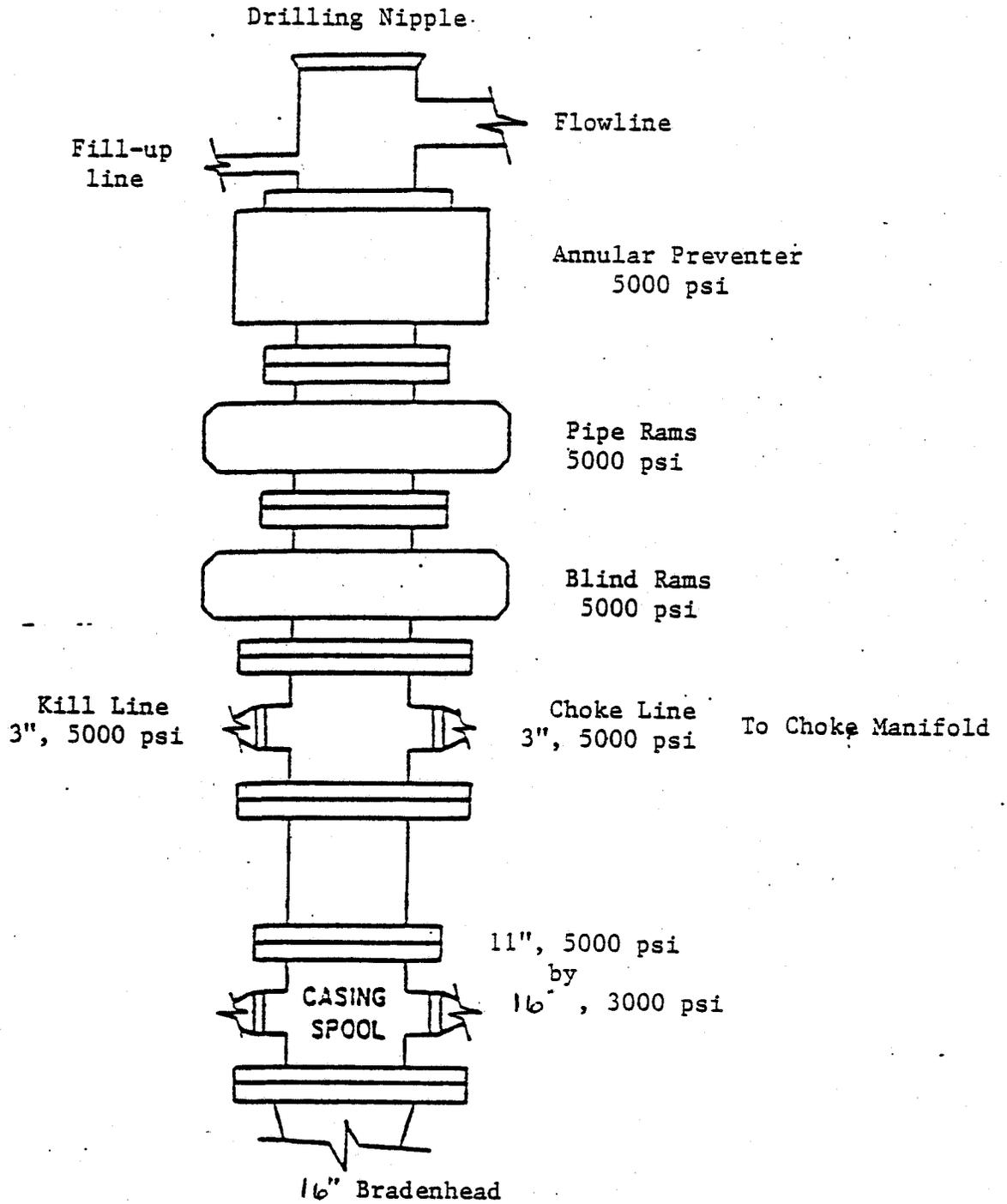


Exhibit A-3
BOPE
7100'-TD



CHOKE MANIFOLD

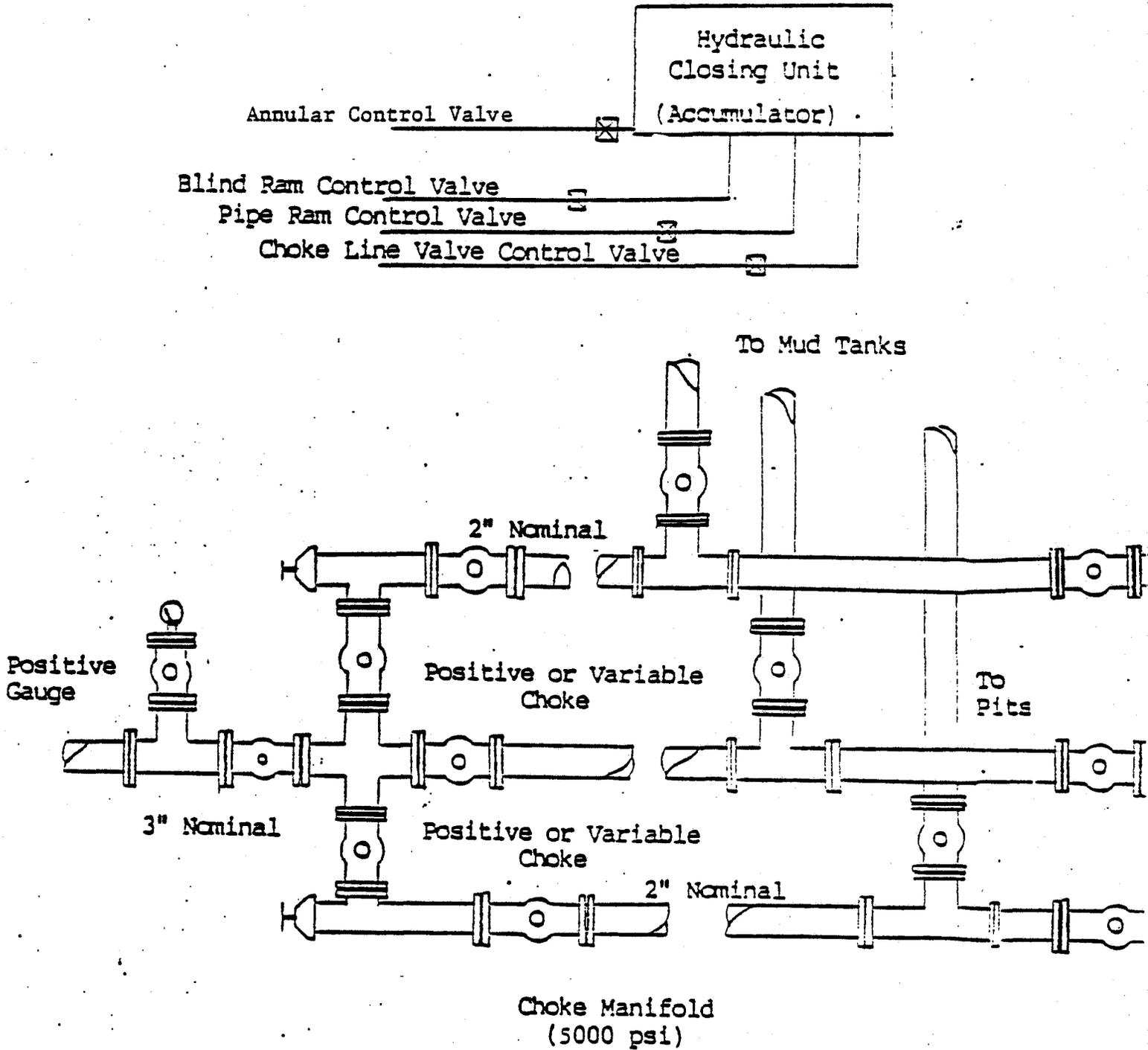


EXHIBIT A-5
BLOWOUT PREVENTION EQUIPMENT

BOP Specifications

1. All BOP equipment shall be fluid and or mechanically operated.
2. BOP's and all fittings will be in good working condition.
3. Equipment through which the bit must pass shall be at least as large as casing size being drilled.
4. Nipple above BOP shall be at least same size as casing set.
5. Upper Kelly Cock and lower Kelly Cock shall be rated at the BOP working pressure.
6. Floor safety valve (Full opening) or drill string BOP with appropriate rated pressure shall be available on rig floor with connections or subs to fit any tool joint in string.
7. Minimum size for choke line shall be 3 inches nominal diameter, minimum size for vent lines downstream of chokes shall be 2 inches nominal, and vent lines which by-passes shall be a minimum of 3 inches nominal and shall be as straight as possible.
8. All valves, fittings and lines between the closing unit and the blowout preventer stack should be of steel construction with a rated working pressure at least equal to working pressure rating of the stack. Lines shall be bundled and protected from damage.
9. Rams will be used in following positions: (ARCO Drl. Supv. may reverse ram location)
 - a) 3000 psi WP Minimum

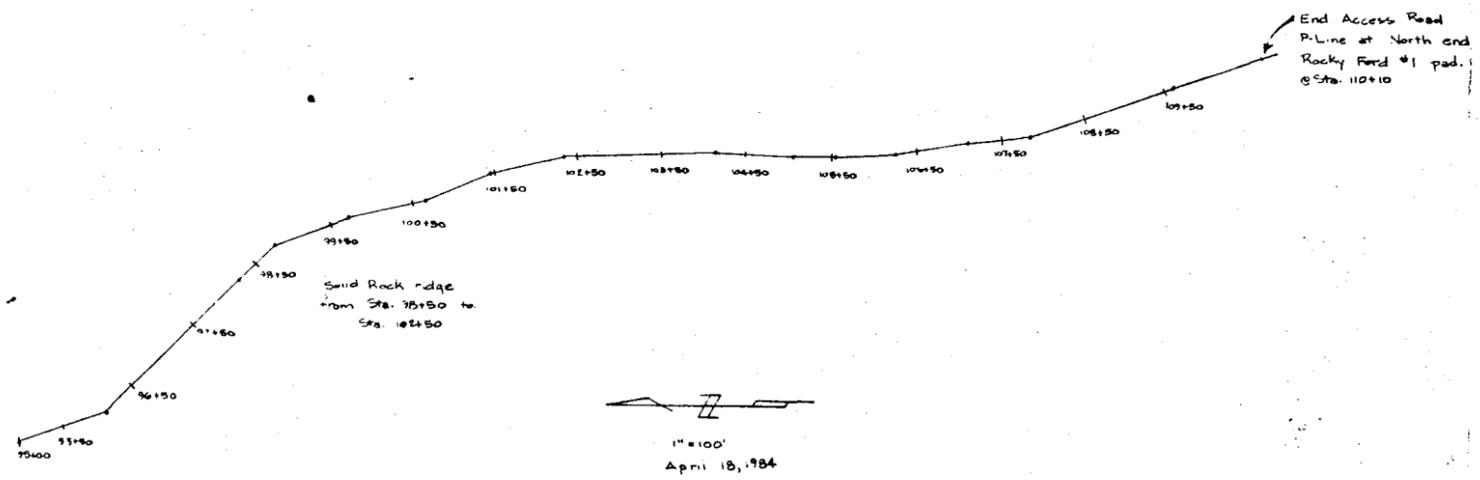
	<u>Drilling</u>	<u>Running Casing</u>
Upper Ram	Blind	Blind
Lower Ram	Drill pipe	Casing Rams
 - b) 5000 psi WP Minimum

	<u>Drilling</u>	<u>Running Casing</u>
Top Ram	Drill pipe	Casing Rams
Middle Ram	Blind	Blind
10. Minimum size for kill line is 2 inches nominal.
11. Ram type preventers shall be equipped with extension hand wheels or hydraulic locks.

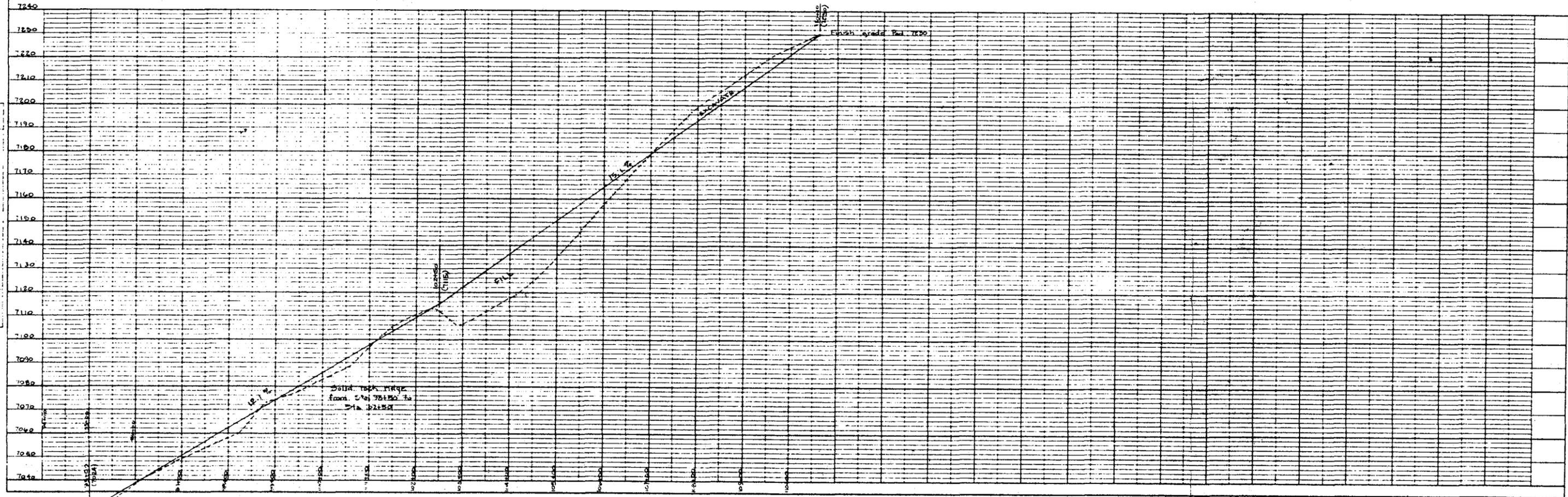
ALL SPECIFICATIONS LISTED ARE PER API-RP53

ARCO OIL & GAS CO.
 Access Road for Rocky Ford #1
 Sec 27, T 30S, R 3W
 Platte Co, UTAH

EXHIBIT C-4
 ROCKY FORD



Prepared by E. Samuel Stegeman, P.E.
E. Samuel Stegeman
 POWERS ELEVATION CO.
 Richfield, Utah.



PLAN
 SHEET NO. 4
 DATE: APRIL 18, 1984

PROFILE
 SHEET NO. 4
 DATE: APRIL 18, 1984

EXHIBIT C-2 ROCKY FORD

ARCO OIL & GAS CO.
Access Road for Rocky Ford #1
Sec. 27, T30S, R35W
Piute Co., UTAH

R = 115.00'
D = 44° 49' 21"
Δ = 65° 50' 00"

L = 126.12'
T = 31.02'
LC = 121.60'

Note: Install 36" CMP in drainage. Widen curve E20 feet for turning radius.

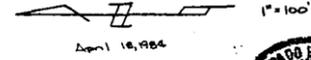
R = 63.14'
D = 39° 45' 06"
Δ = 126° 30' 00"

L = 117.19'
T = 20.00'
LC = 117.19'

Intermittent rock outcropping near surface 57100 to 59100

R = 228.36'
D = 28° 32' 16"
Δ = 39° 15' 00"

R = 90.00'
D = 67° 31' 45"
Δ = 70° 30' 00"



April 18, 1984

Prepared by E. Samuel Stegeman, P.E.

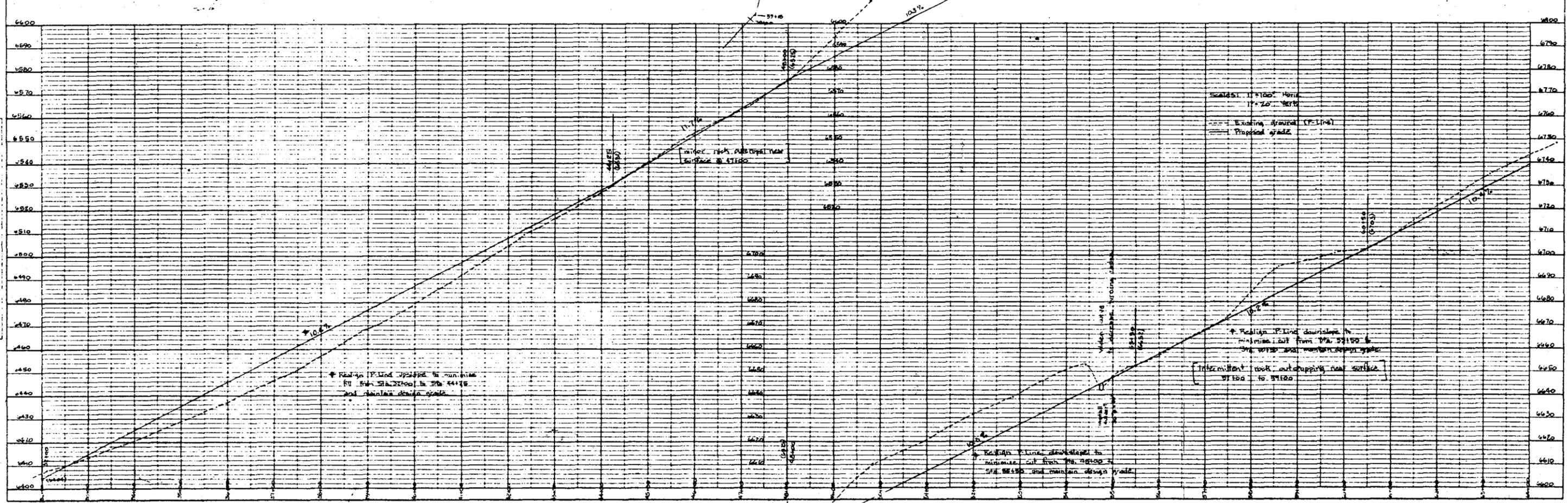


E. Samuel Stegeman
DOWERS ELEVATION CO.
Richfield, Utah

PLAN
PROPOSED
ROUTE MARK
REVISIONS
DATE
BY

Note: Realignment of P-Line will allow design grades to be maintained through sections shown

PROFILE
PROPOSED
ROUTE MARK
REVISIONS
DATE
BY

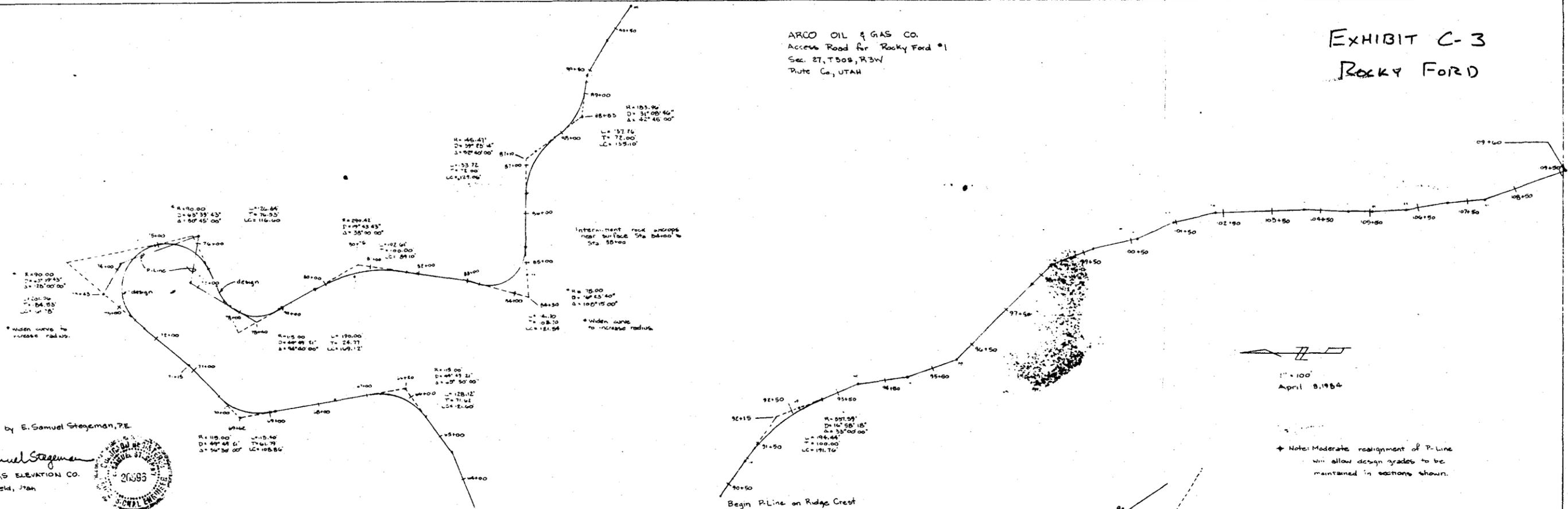


DATE: PLAN PROFILE
APPROVED BY: [Signature]

ARCO OIL & GAS CO.
 Access Road for Rocky Ford #1
 Sec. 27, T00S, R3W
 Plute Co., UTAH

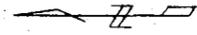
EXHIBIT C-3
 ROCKY FORD

PLAN



Prepared by E. Samuel Stegeman, P.E.

Samuel Stegeman
 POWERS ELEVATION CO.
 Richfield, Utah



1" = 100'
 April 8, 1954

Note: Moderate realignment of P-Line will allow design grades to be maintained in sections shown.

PROFILE

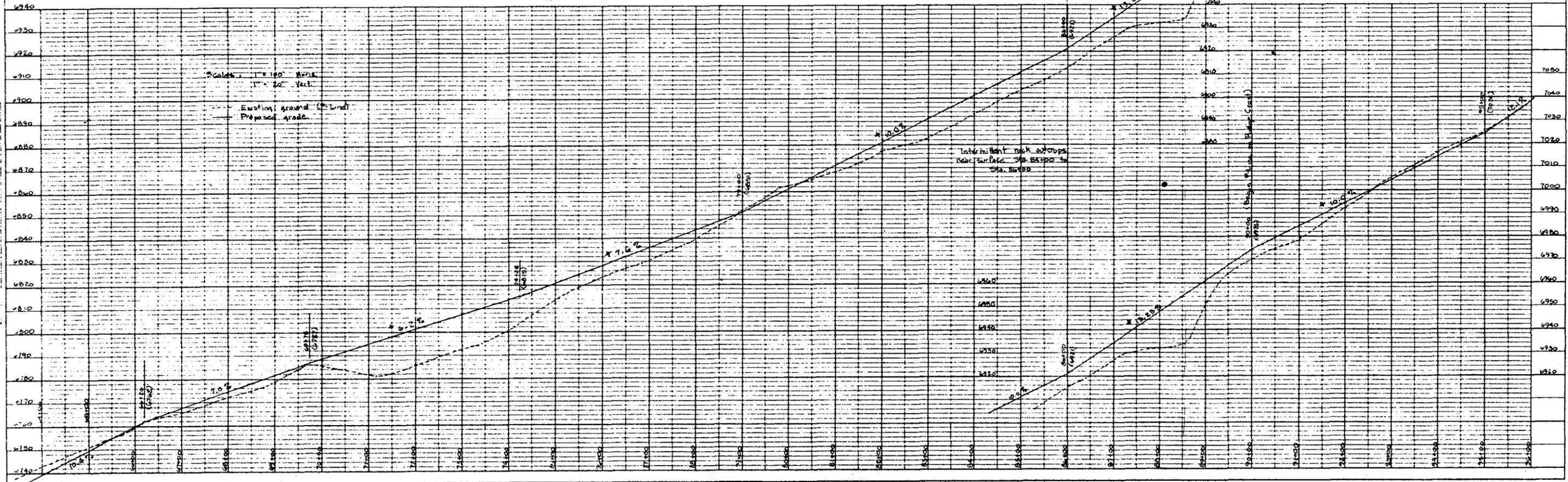


EXHIBIT C-1 ROCKY FORD

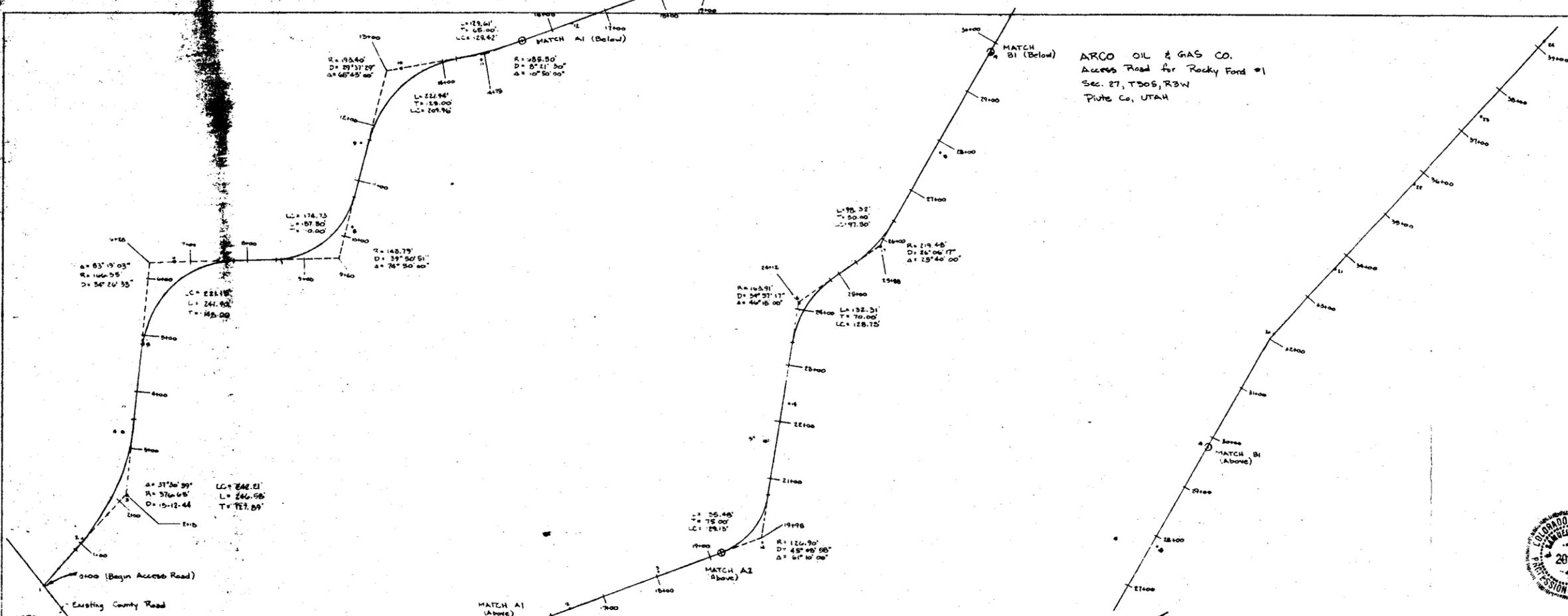
ARCO OIL & GAS CO.
Access Road for Rocky Ford #1
Sec. 27, T20S, R3W
Piute Co, UTAH

1"=100' Horiz
April 18, 1984

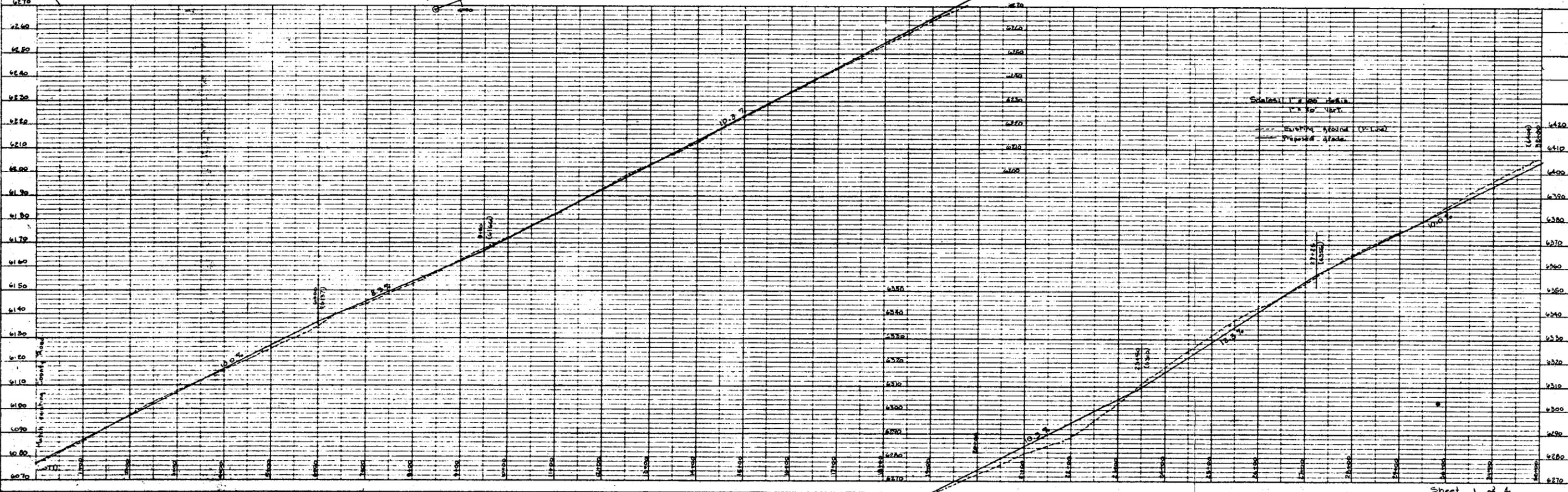
Prepared by E. Samuel Stegeman, P.E.
E. Samuel Stegeman
POWERS ELEVATION CO.
Richfield, Utah



PLAN
SCALE: 1"=100'



PROFILE
SCALE: 1"=100' Vert

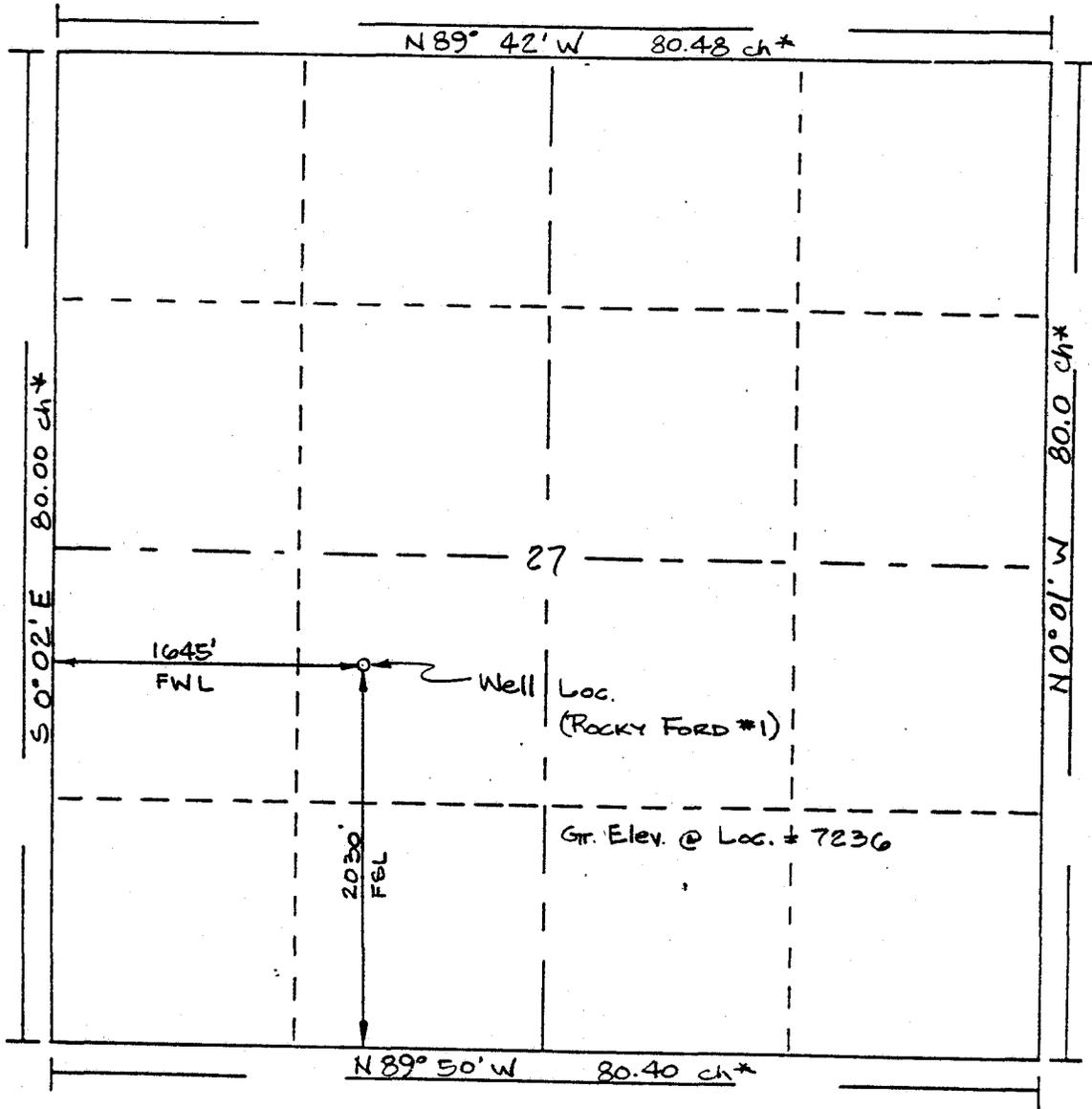




* Record GLO plat 1000

Exhibit C
Certified Location Plat
Rocky Ford #1
ARCO Oil & Gas Co.

R. 3 W



T. 30 S

Scale... 1" = 1000'

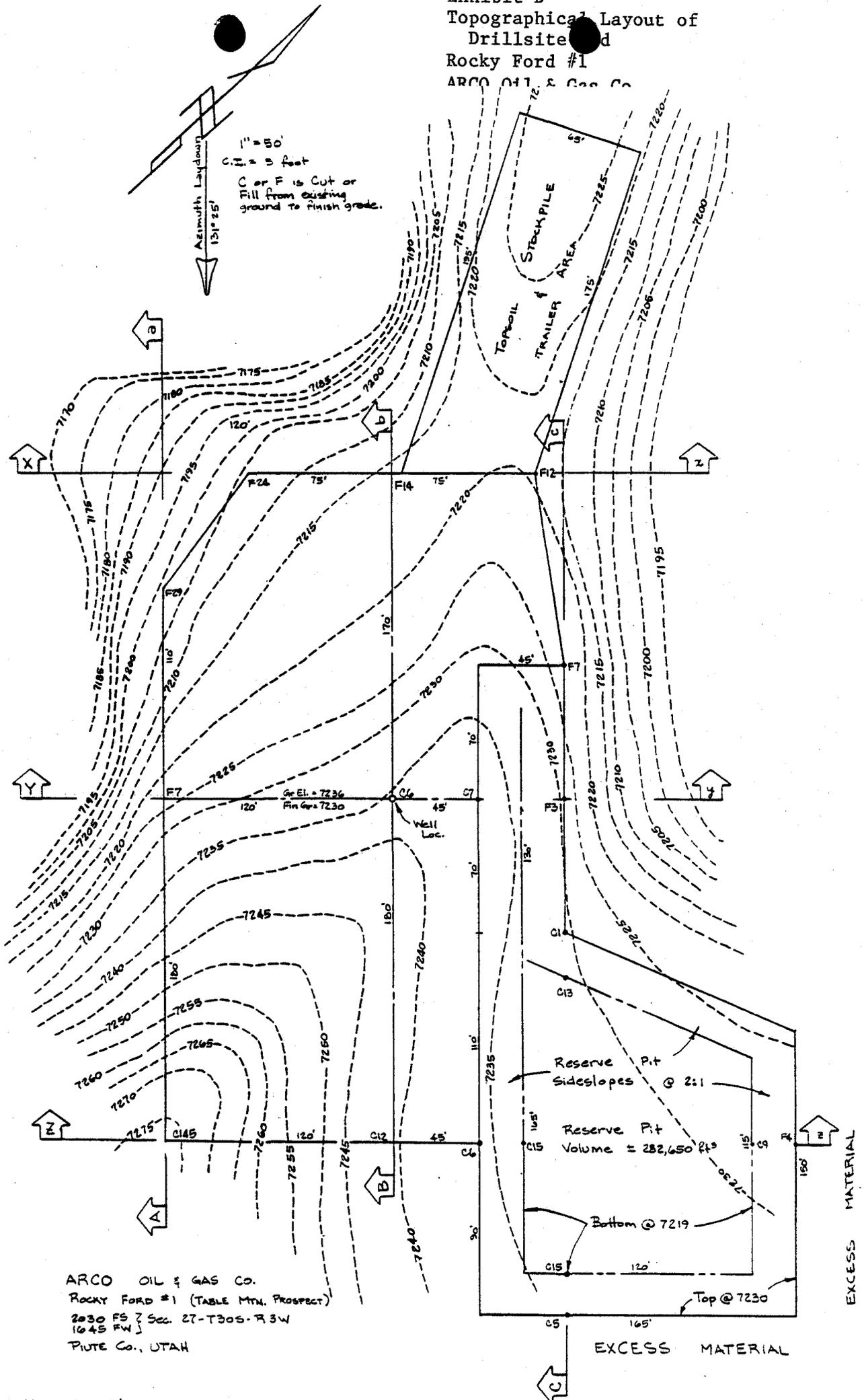
Powers Elevation of Denver, Colorado
 has in accordance with a request from SUZANNE BARNES
 for ARCO OIL & GAS Co.
 determined the location of ROCKY FORD #1 (TABLE MTN. PROD.)
 to be 2030' FSL & 1645' FWL of Section 27 Township 30 South
 Range 3 West of the SALT LAKE Meridian
 PIUTE County, UTAH

I hereby certify that this plat is an
 accurate representation of a correct
 survey showing the location of

Date: MARCH 28, 1984

T. Nelson
 Licensed Land Surveyor No. 2711
 State of UTAH

Exhibit D
 Topographical Layout of
 Drillsite #1
 Rocky Ford #1
 ARCO Oil & Gas Co.

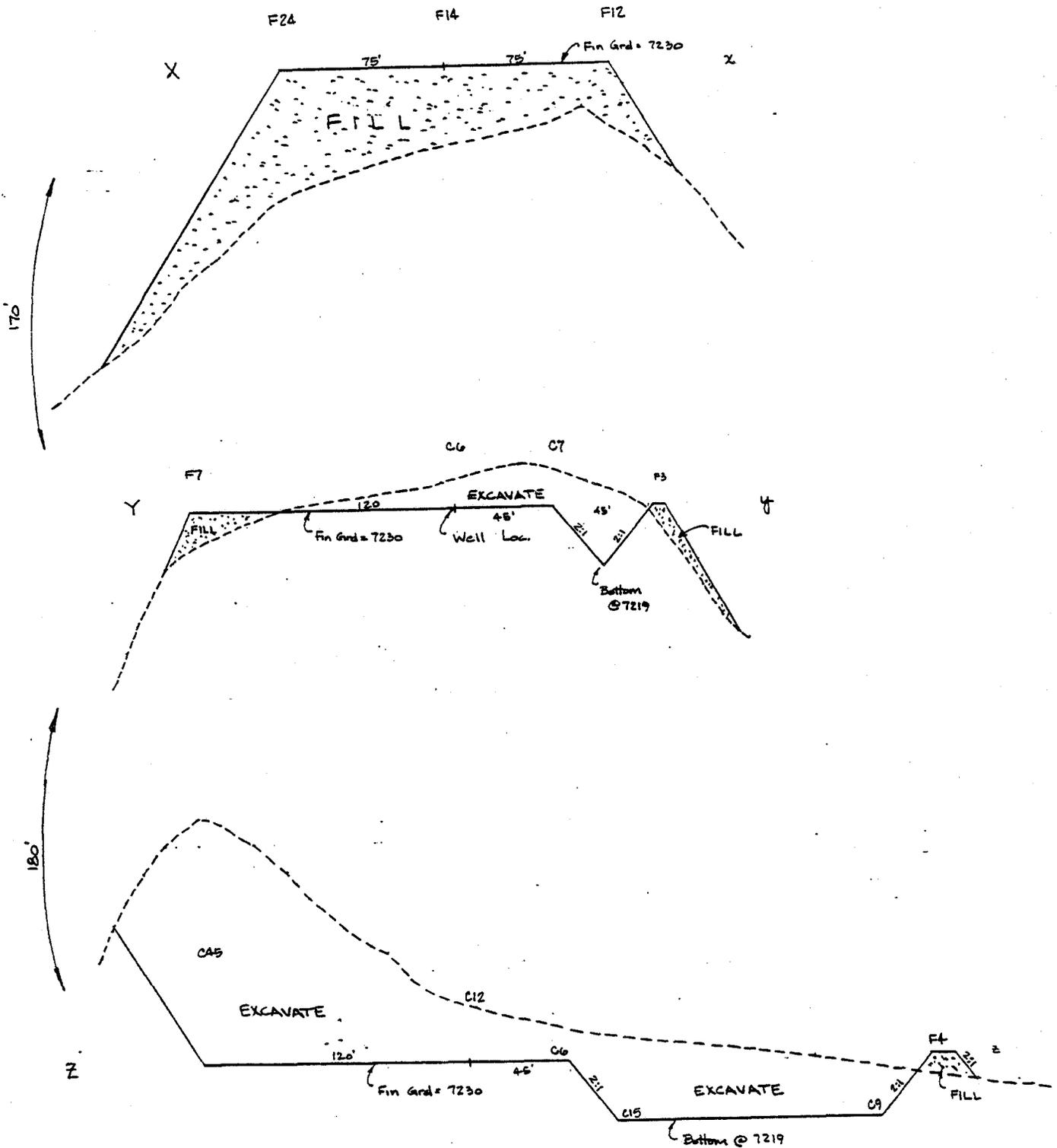


ARCO OIL & GAS CO.
 ROCKY FORD #1 (TABLE Mtn. Prospect)
 2830 FS } Sec. 27-T30S-R3W
 1645 RW }
 PIUTE Co., UTAH

MARCH 26, 1984

EXHIBIT F

Cut & Fill Diagram II
Drillsite Pad



--- Existing ground
— Proposed grade

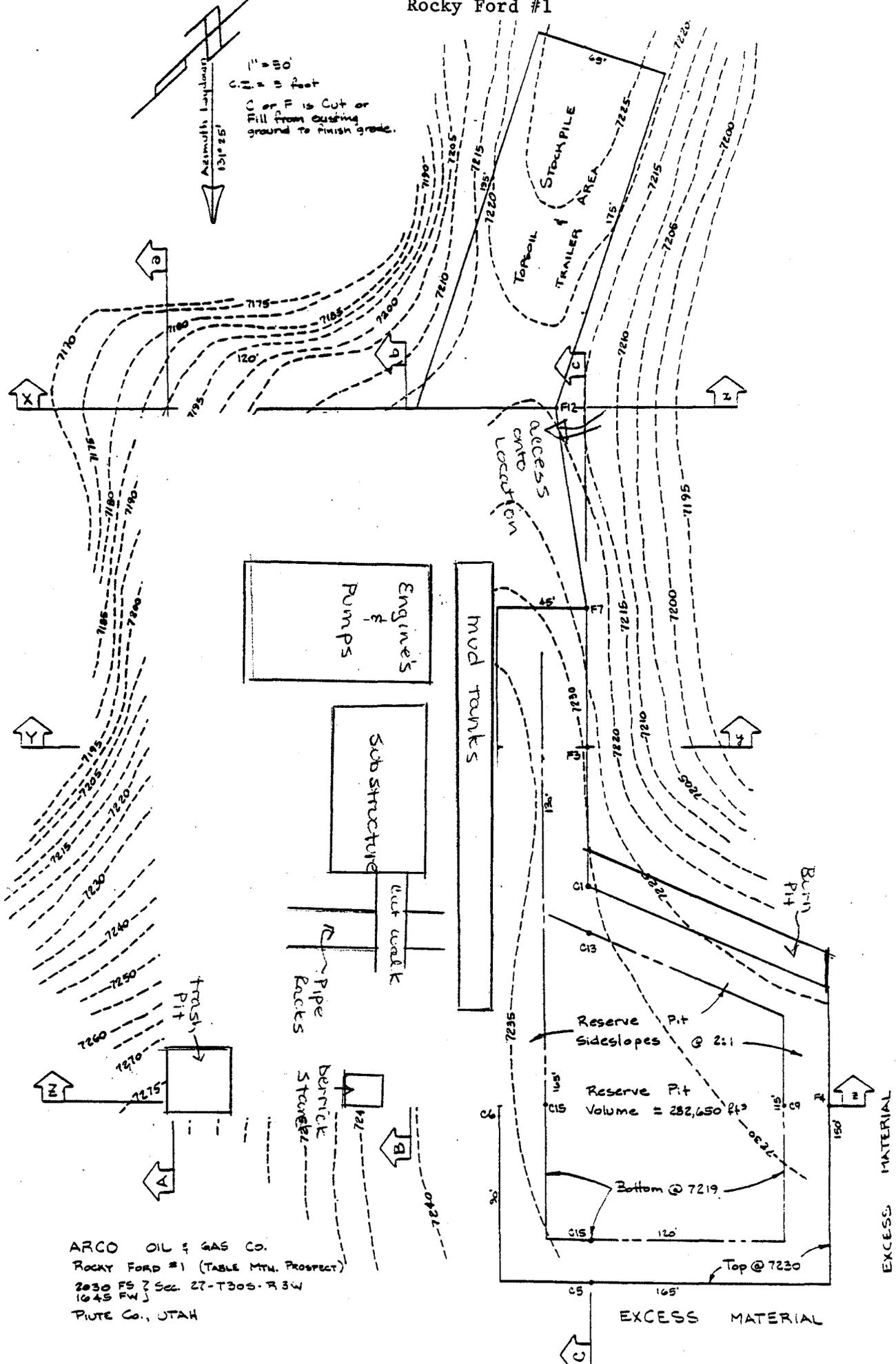
C or F is Cut or Fill from existing ground to finish grade.

Scales: 1" = 50' Horiz.
1" = 20' Vert.

All sideslopes @ 1.5:1 unless noted.

ARCO OIL & GAS CO.
Rocky Ford #1 (TABLE MTH. PROD.)
NE-SW 27-30S-3W
PLUTE Co., UT.

Exhibit "G"
 Rig & Equipment Layout
 of Drillsite Pad
 Rocky Ford #1



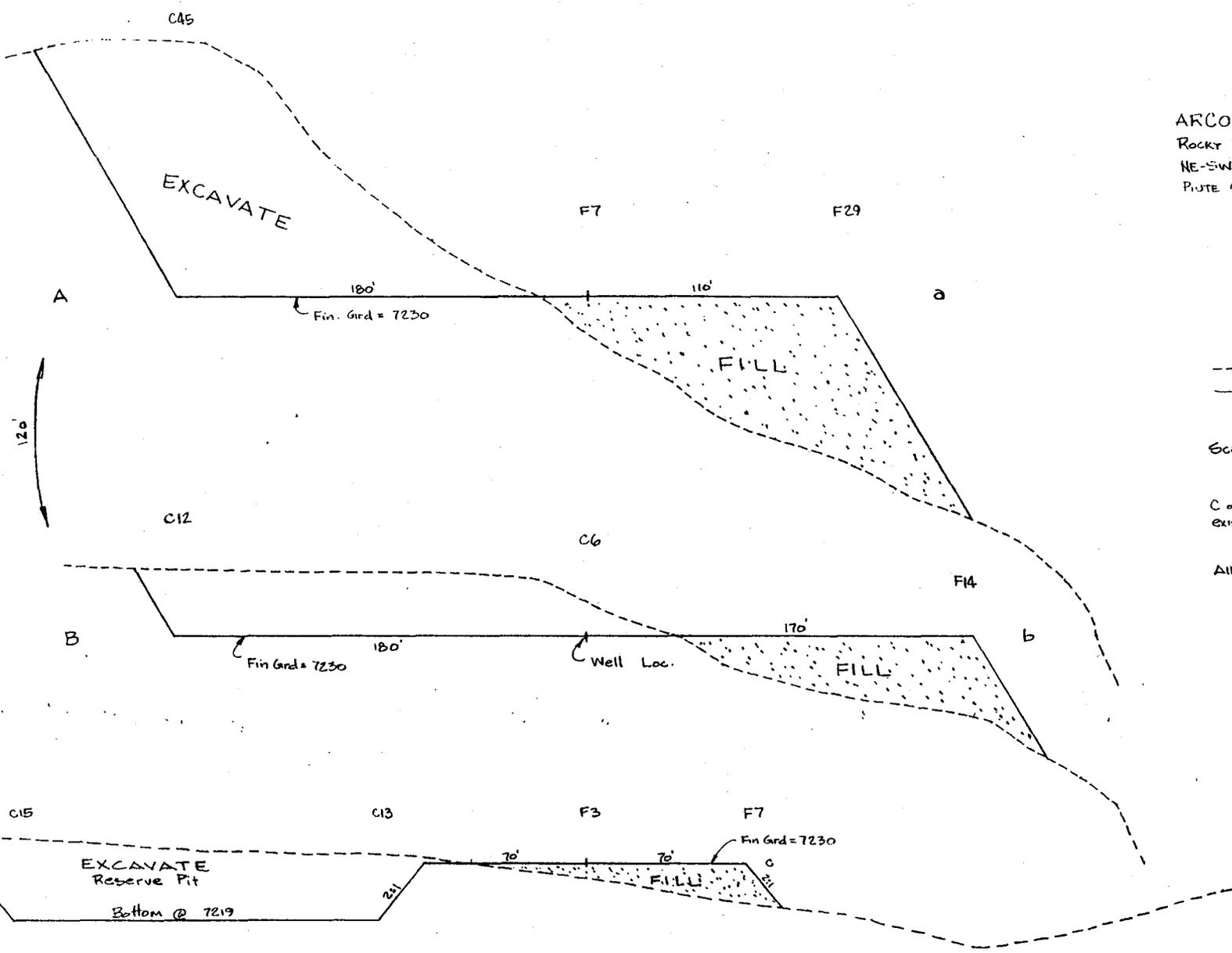
Note: Dimensions NOT TO SCALE

ARCO OIL & GAS CO.
 ROCKY FORD #1 (TABLE MTH. PROSPECT)
 2030 FS 2 Sec. 27-T30S-R3W
 104S FW
 PIUTE Co., UTAH

EXHIBIT E

Cut & Fill Diagram
Drillsite Pad

ARCO OIL & GAS CO.
ROCKY FORD #1 (TABLE MTH. PROS.)
NE-SW 27-30S-3W
PIUTE Co., UT.



--- Existing ground
— Proposed grade

Scales: 1" = 50' Horiz.
1" = 20' Vert.

C or F is Cut or Fill from existing ground to finish grade.

All sideslopes @ 1.5:1 unless noted.

MARCH 26, 1984
E.S.S.

POWERS ELEVATION CO.
RICHFIELD, UT.

76
Unit "H"
Archeological Report
Access Road & Drillsite Pad
Rocky Ford #1

A CULTURAL RESOURCE INVENTORY OF THE
ROCKY FORD NO. 1 (TABLE MOUNTAIN PROSPECT)
WELL PAD SITE AND ACCESS ROUTE,
PIUTE COUNTY, UTAH

Prepared For:

Bureau of Land Management
Richfield District
Richfield, Utah

Prepared Under Contract With:

Atlantic Richfield Co.
P.O. Box 5540
Denver, Colorado 80217

Submitted By:

William E. Davis
Abajo Archaeology
P.O. Box 100
Bluff, Utah 84512

U.S. Department of the Interior Antiquities Permit

No. 83-UT-251

April 16, 1984

INTRODUCTION

On April 13, 1984 a cultural resource inventory was conducted for Atlantic Richfield Co. at the proposed Rocky Ford No. 1 (Table Mountain Prospect) well pad site and access route, located approximately 2 miles south of Kingston, Piute County, Utah. The survey was performed at the request of Ms. Suzanne Barns of Atlantic Richfield Co., Denver, Colorado. The proposed well pad site and access route are located on lands administered by the U.S. Department of the Interior, Bureau of Land Management, Richfield District. The objectives of the cultural resource inventory were to locate any cultural resources occurring within and near the proposed project area, to record and document those cultural resources and to recommend appropriate procedures to mitigate potential adverse effects to the resources that may result from project activities. The accomplishment of these objectives fulfills compliance requirements set forth in the National Historic Preservation Act of 1966, the National Environmental and Historic Preservation Act of 1969, Executive Order 11593 of 1971 and the Archaeological Resources Preservation Act of 1979.

The fieldwork was conducted under U.S. Department of the Interior Antiquities Permit No. 83-UT-251, issued to Abajo Archaeology of Bluff, Utah. The survey was performed by Deborah A. Westfall and William E. Davis. On April 13, 1984 a search of the prehistoric and historic site files was performed at the BLM Richfield District Office. The literature search revealed that no previously recorded sites exist in the study area and no sites are currently listed on the National Register of Historic Places that would be adversely affected by project activities.

PROJECT DESCRIPTION AND LOGISTICS

Atlantic Richfield Co. has proposed to establish a well pad (Rocky Ford No. 1) on an elevated landform located two miles south of Kingston, Piute County, Utah. The project area is located in the SW, NE, SW quarter of Section 27, Township 30 South, Range 3 West (Junction Quadrangle, 7.5', 1966) (UTM: 395700mE, 4225150mN) (Figure 1). As proposed, project activities would entail modification of approximately 4 acres of land surface for the well pad and associated facilities. In addition, a 3.2 kilometer (2 mile) access route would be provided

by constructing a road from the NW, SE, SW quarter of Section 21, Township 30 South, Range 3 West, extending south-southeast to the well location.

PROJECT SETTING

The proposed Rocky Ford No. 1 well pad site is situated at an elevation of 2195 meters (7200 feet) and is located on a narrow knoll that overlooks Circle Valley to the west. The surface soil cover consists of a loose silty loam overlying tertiary volcanics which consist mostly of diorite porphyry and extrusives. Vegetation communities include pinyon-juniper, short sagebrush and assorted grasses.

CULTURAL RESOURCE INVENTORY

The cultural resource inventory of the proposed well pad site was conducted by walking systematic parallel transects spaced at 10 meter intervals. A total of 10 acres was inspected, out of which no cultural resources were observed.

The access route was inspected by walking a close zig-zag pattern extending 15 meters (50 feet) on either side of the staked centerline. One isolated artifact was found during the access route survey. The following describes the morphological attributes of the isolated artifact:

Specimen No. 1 (Figure 2)	Probable drill/perforator fragment, large rectangular haft element. Artifact manufactured out of thick interior flake. Moderately thin, transverse cross-section; bifacially thinned by soft hammer flaking, retouch pressure flaking. Extensive use-wear around margins and distal end. Raw material is smoky obsidian.
Measurements:	Length: indeterminate Width: 32 mm Thickness: 8.5 mm
Legal Location:	NW, NW, NW quarter, Section 27, Township 30 South, Range 3 West, Junction Quadrangle, 7.5', 1966.

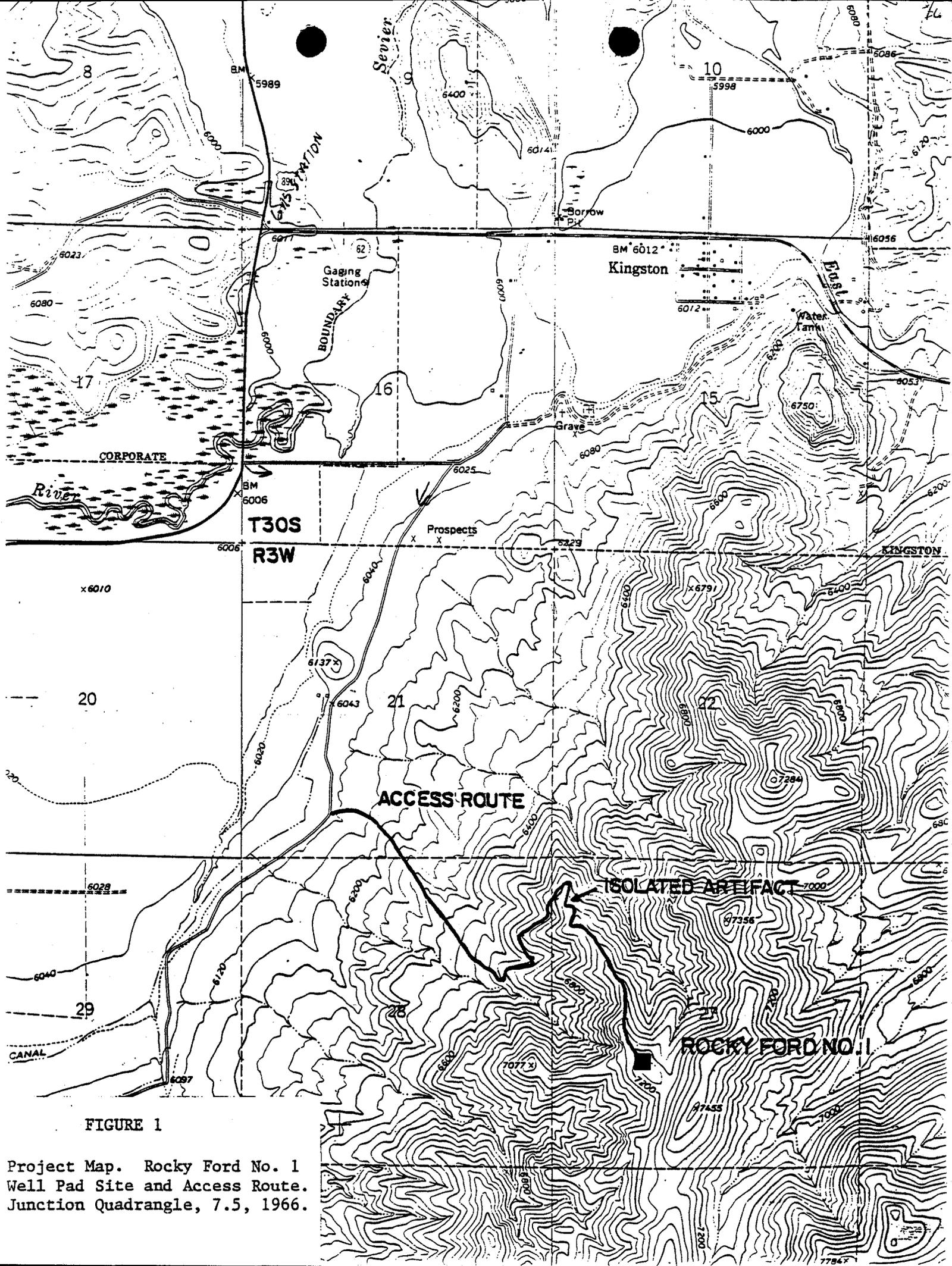
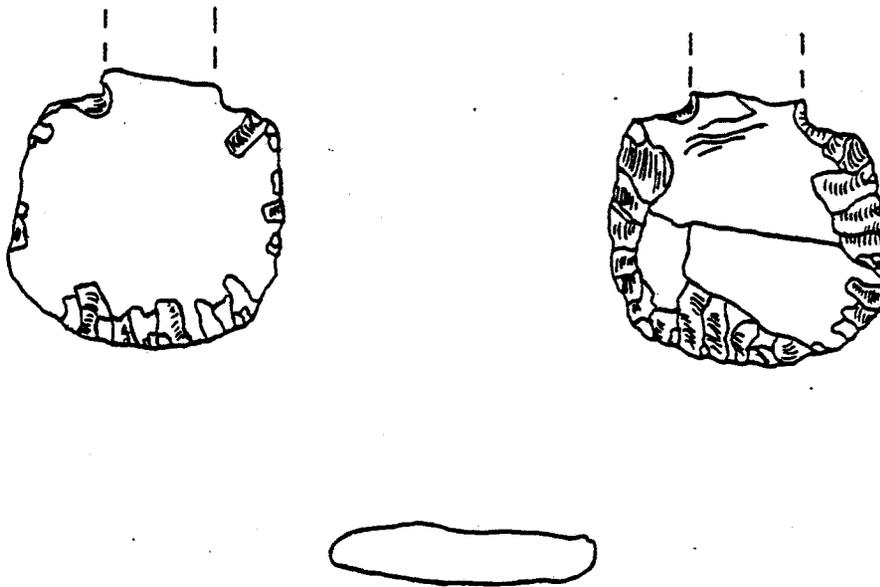


FIGURE 1

Project Map. Rocky Ford No. 1
Well Pad Site and Access Route.
Junction Quadrangle, 7.5, 1966.

FIGURE 2
ISOLATED ARTIFACT
DRILL-PEFORATOR HAFT ELEMENT
FRAGMENT



ACTUAL SIZE

UTM:

395340mE, 4225950mN

MANAGEMENT RECOMMENDATIONS

As indicated in this report, no cultural resources were found within the proposed Rocky Ford No. 1 well pad site. One isolated artifact was found within the proposed access route. The artifact is not considered to be a significant cultural resource due to its limited research potential. Moreover, it is felt that the description of the artifact presented in this report constitutes adequate mitigation of adverse effects to the cultural resource data base. With the condition that project activities be confined to the established project area boundaries, it is recommended that archaeological clearance be granted for Atlantic Richfield Co. Rocky Ford No. 1 well pad site and its associated access route.

CONFIDENTIAL

OPERATOR Acres Oil & Gas Co. DATE 5-2-84

WELL NAME Rocky Ford #1

SEC NE SW 27 T 30S R 3W COUNTY Piute

43-031-30012
API NUMBER

Fed.
TYPE OF LEASE

POSTING CHECK OFF:

<input type="checkbox"/>	INDEX	<input type="checkbox"/>	HL	<input type="checkbox"/>
<input type="checkbox"/>	NID	<input type="checkbox"/>	PI	<input type="checkbox"/>
<input type="checkbox"/>	MAP	<input type="checkbox"/>		<input type="checkbox"/>

PROCESSING COMMENTS:

No other wells
Need water permit
Exception request received.

APPROVAL LETTER:

SPACING: A-3 _____ UNIT c-3-a _____ CAUSE NO. & DATE

c-3-b c-3-c

SPECIAL LANGUAGE:

1 - Water

May 10, 1984

Arco Oil and Gas Company
a Division of Atlantic Richfield Company
P. O. Box 5540
Denver, Colorado 80217

RE: Well No. Rocky Ford #1
NESE Sec. 27, T. 30S, R. 3W
2030' FSL, 1645' FHL
Plute County, Utah

Gentlemen:

Approval to drill the above referenced oil well is hereby granted in accordance with Rule C-3(c), General Rules and Regulations and Rules of Practice and Procedure, subject to the following stipulations:

1. Prior to commencement of drilling, receipt by the Division of evidence providing assurance of an adequate and approved supply of water.

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

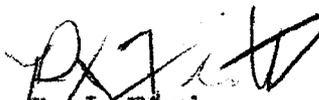
1. Spudding notification to the Division within 24 hours after drilling operations commence.
2. Submittal to the Division of completed Form OGC-8-X, Report of Water Encountered During Drilling.
3. Prompt notification to the Division should you determine that it is necessary to plug and abandon this well. Notify R. J. Firth, Associate Director, Telephone (801) 533-5771 (Office), 571-6068 (Home).
4. Compliance with the requirements and regulations of Rule C-27, Associated Gas Flaring, General Rules and Regulations, Oil and Gas Conservation.

Arco Oil and Gas Company
Well No. Rocky Ford #1
May 10, 1984
Page 2

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

The API number assigned to this well is 43-031-30012.

Sincerely,



R. J. Firth
Associate Director, Oil & Gas

RJF/as

cc: Branch of Fluid Minerals

Enclosures

SUBMIT IN TRIPPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR

~~CONFIDENTIAL~~ 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
ARCO Oil and Gas Company,
a Division of Atlantic Richfield Company

3. ADDRESS OF OPERATOR
P. O. Box 5540, Denver, Colorado 80217

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
At surface 2030'FSL & 1645'FWL, Sec. 27-T30S-R3W
At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
Approx 2-1/2 miles south of Kingston, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)
1645' lease

16. NO. OF ACRES IN LEASE
2560

17. NO. OF ACRES ASSIGNED TO THIS WELL
NOT ASSIGNED

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
NONE

19. PROPOSED DEPTH
11,700'

20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
7236' GR

22. APPROX. DATE WORK WILL START*
July 15, 1984

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
--------------	----------------	-----------------	---------------	--------------------

RECEIVED

MAY 11 1984

DIVISION OF OIL
GAS & MINING

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

24. SIGNED J. McCarthy TITLE Operations Manager DATE 30 April 1984
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

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

State O/G

3456

D/C

U43303
OG Lse

20

133
D/C

5816
D/C

21

22

23

2

4090

U26804
OG Lse

U2680
OG

7475
D/C

3501
D/C

U42540
OG Lse

28

27

26

2

ARCO
Well #1

37

29

U26806
OG Lse

U26805
OG

53
C

SS 11

32

33

34

35

3

43-65-0008
D/C

U26803
OG Lse

U26803
OG Lse

43-65
55

This Contingency Plan was prepared by:

ESSE INTERNATIONAL, INC.

P.O. BOX 424

DICKINSON, NORTH DAKOTA 58601

(701) 227-0315

ESSE International, Inc. is recognized by the International Association of Drilling Contractors and is a member of IADC's H₂S Safety Committee.

CONTINGENCY & EVACUATION PLAN

This Contingency Plan was written specifically for:

ARCO OIL & GAS COMPANY

P.O. BOX 5540

DENVER, COLORADO 80217

(303) 293-4600

Action Plan for Accidental Release of H₂S

ROCKY FORD # 1

PIUTE COUNTY, UTAH

This Plan is Subject to Updating

April 23, 1984

CONTINGENCY PLAN INDEX

- I. INTRODUCTION
 - A. Oil Company Address and Legal Description of Well Site
 - B. Directions to Well Site
 - C. Purpose of Plan
- II. LOCATION LAYOUT
 - A. Location Map
 - 1) Safety Briefing Areas
 - 2) Directions of Prevailing Winds
 - 3) Wind Sock Locations
 - 4) 2nd Emergency Escape Route
 - B. General & Specific Area Maps
- III. SAFETY EQUIPMENT
 - A. Safety Equipment Provided by ESSE INTERNATIONAL, INC.
 - B. Type of Equipment and Storage Locations
 - C. Maximum Number of People on Location at any one time
- IV. OPERATING PROCEDURES
 - A. Blowout Prevention Measures During Drilling
 - B. Gas Monitoring Equipment
 - C. Crew Training & Protection
- V. OPERATING CONDITIONS
 - A. Definition of Warning Flags
 - B. Circulating Out Kick
 - C. Coring Operations in H₂S Bearing Zones
 - D. Drill Stem Testing
 - E. Well Killing Worksheets
- VI. EMERGENCY PROCEDURES
 - A. Sounding Alarm
 - B. Drilling Crew Actions
 - C. Responsibilities of Personnel
 - D. Steps to be Taken
 - 1) Company Personnel
 - 2) Contract Personnel
 - E. Leak Ignition
 - F. General Equipment

VII. LIST OF APPENDICES

1. Emergency & Medical Facilities
2. Law Enforcement Agencies & Fire Fighting Facilities
3. Governmental Agencies
4. Radio & Television Stations
5. Air Service & Motels/Hotels

VIII. RESIDENTS AND LANDOWNERS

- A. Residents Within 2 Mile Radius and Telephone Numbers
- B. 2 Mile Radius Map with Residences Shown
- C. Landowners Map Showing Landowners Within 2 Mile Radius

IX. ADDITIONAL INFORMATION

- A. Hydrogen Sulfide Essay
- B. Do you Know?
- C. Rescue Breathing
- D. The Use of Self-contained Breathing Equipment
- E. Instruction Manual for Use of Scott SKA-PAK
- F. Operating & Maintenance Instruction for Scott Air-Pak IIA

CONTINGENCY & EVACUATION PLAN

ARCO OIL & GAS COMPANY

P.O. BOX 5540

DENVER, COLORADO 80217

(303) 293-4600

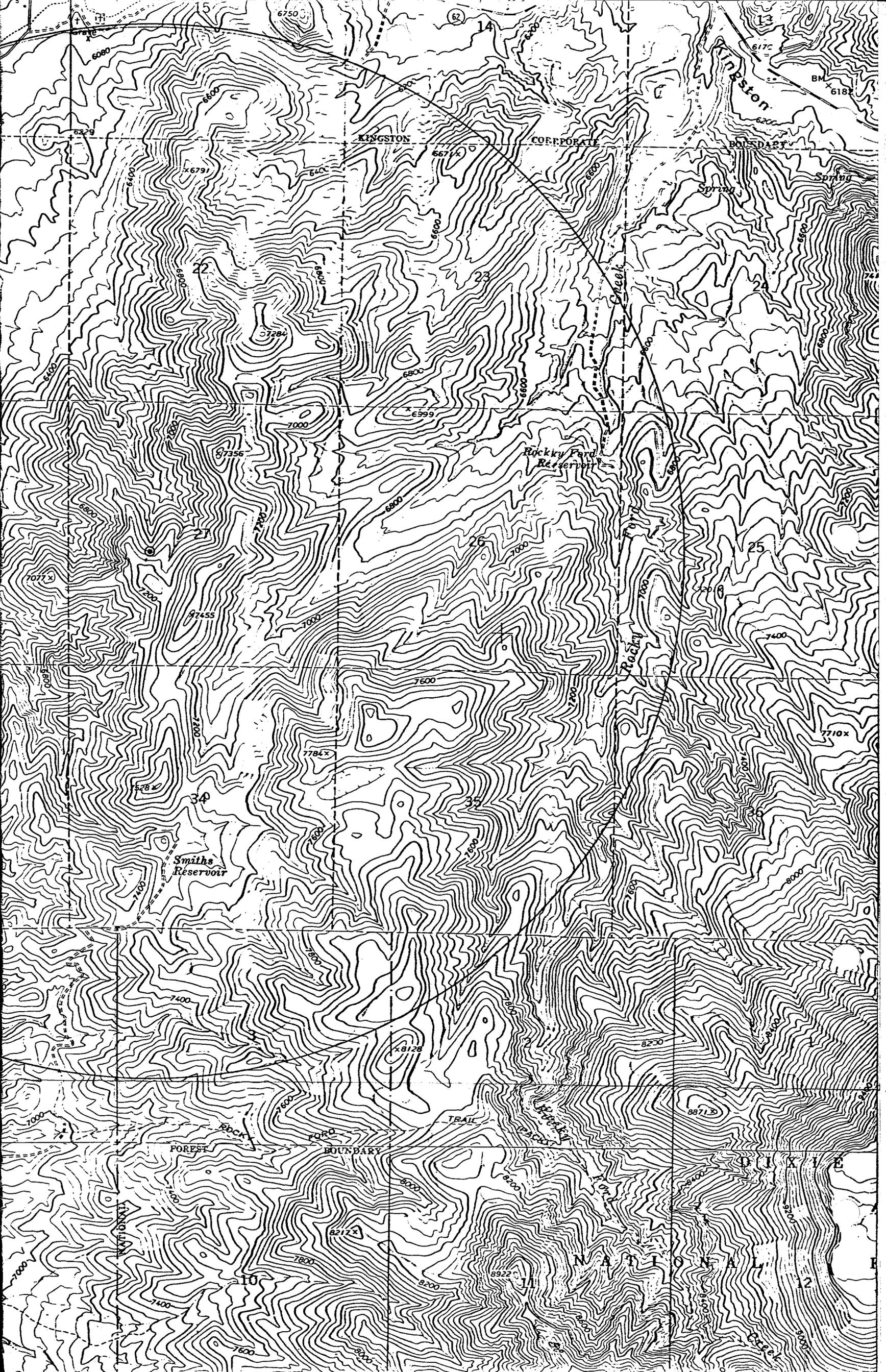
WELL: ROCKY FORD # 1
LOCATION: Section 27, T30S, R3W
2030' FSL & 1645' FWL
Piute County, Utah

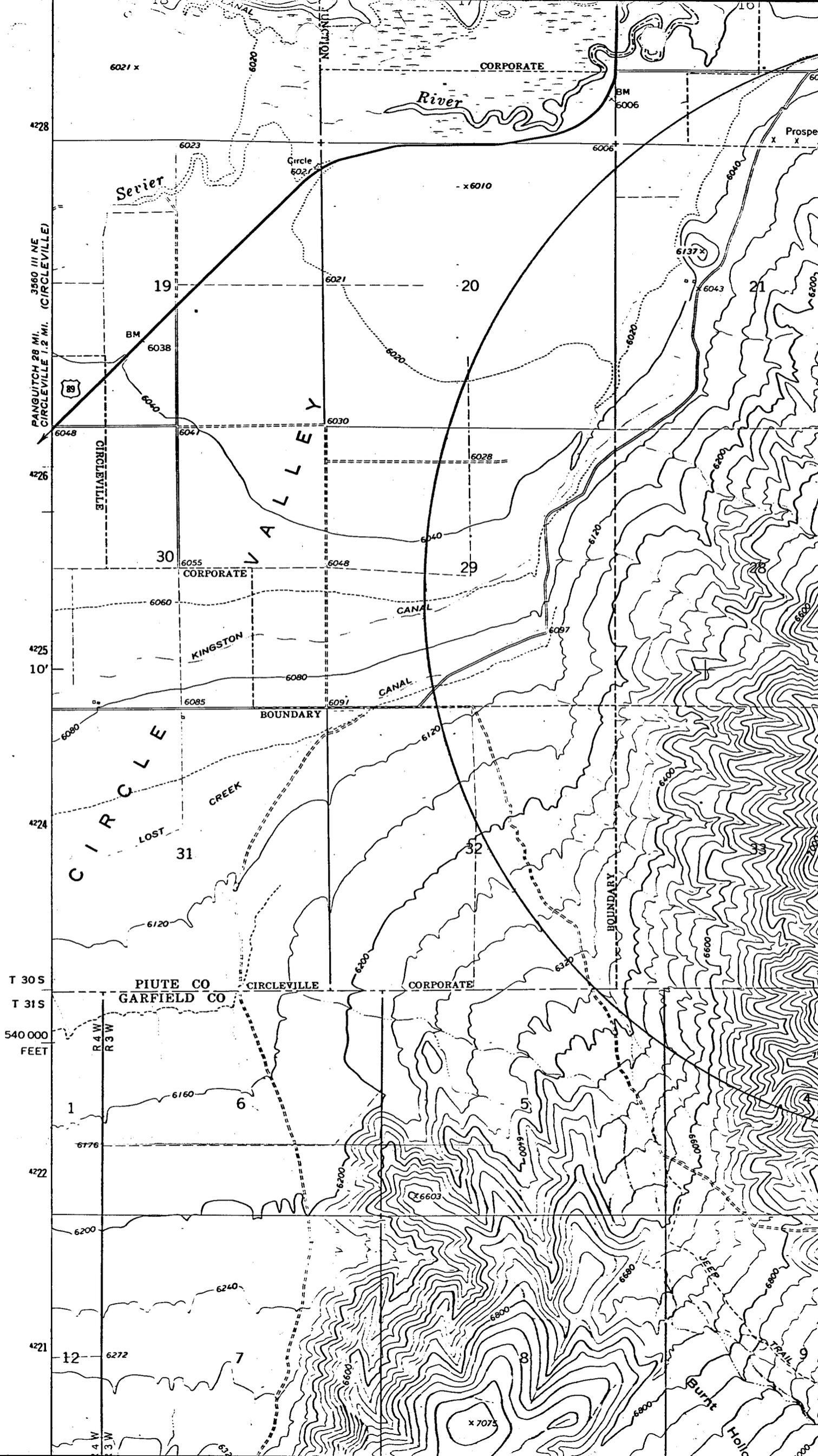
DIRECTIONS TO WELL SITE:

PURPOSE OF PLAN:

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 drilling or completion operations in formations which may contain Hydrogen Sulfide Gas (H^2S).

As a precautionary measure, this contingency plan has been prepared to assure the safety of all concerned, should a disaster occur. However, Arco Oil & Gas Company may have specified materials and practices for the drilling or completion of this well which supercede the minimum requirements as outlined in this plan.





3560 III NE
CIRCLEVILLE 1.2 MI.
RANGUITCH 28 MI.



T 30 S
T 31 S
540 000
FEET

R 4 W
R 3 W

R 4 W
R 3 W

PIUTE CO
GARFIELD CO
CIRCLEVILLE CORPORATE

Serier

V
A
L
L
E
Y

C
I
R
C
L
E

CREEK

River

19

20

21

30

29

28

31

32

12

7

9

BM 6038

BM 6006

Circle 6021

6137 x

6043

Prospe x x

CORPORATE

KINGSTON

BOUNDARY

BOUNDARY

CANAL

CANAL

CORPORATE

JEFER

Burnt
Halls

6021 x

6030

CORPORATE

4278

4276

4275

4274

T 30 S

T 31 S

4272

4271

6023

6021

6006

BM 6038

6048

6047

6030

6028

6055

6048

6040

6060

6085

6097

6080

6120

6400

6120

6320

6776

6160

6200

6009

6603

6200

6240

6400

6600

6800

6272

6272

6800

x 7075

6800

6800

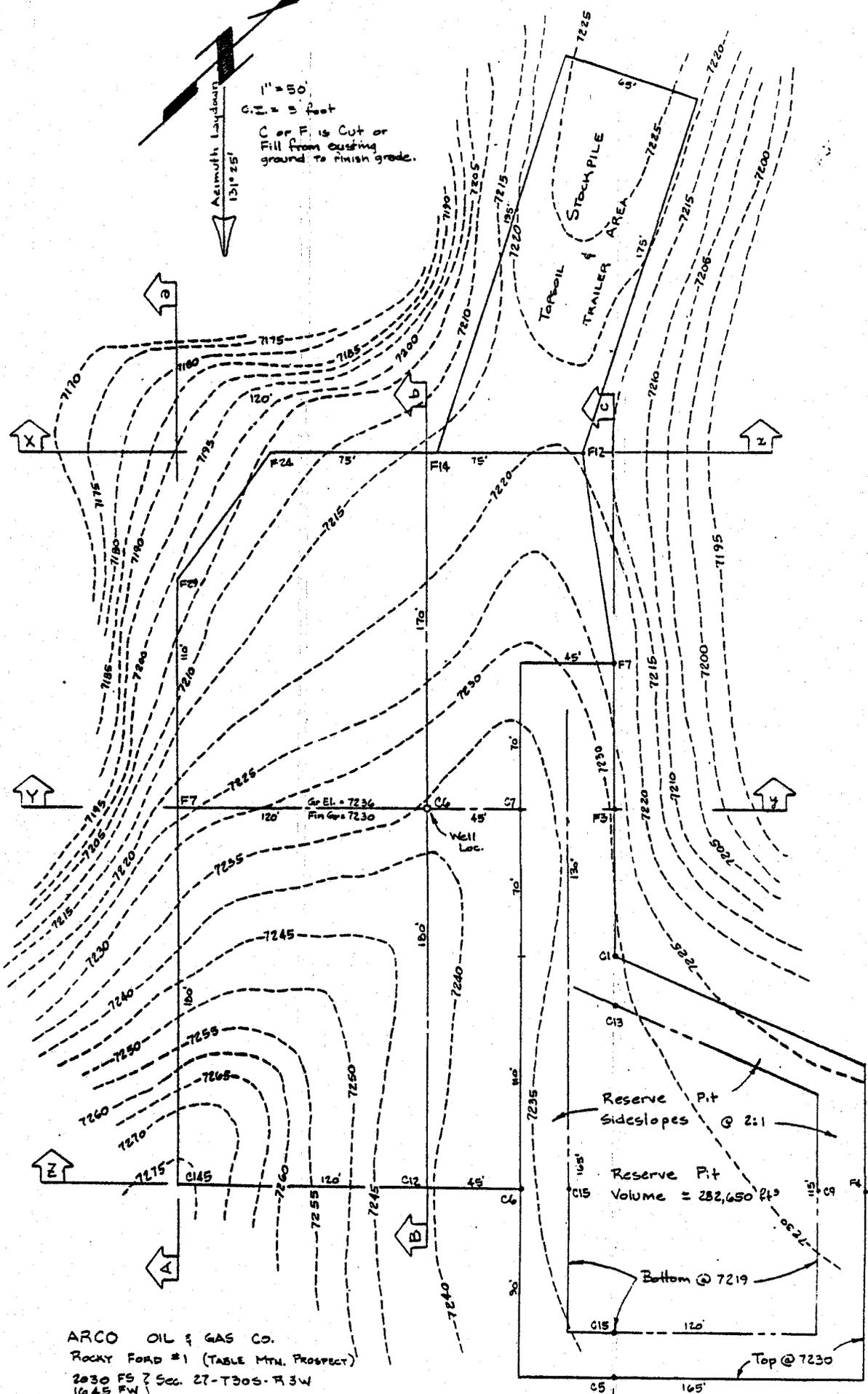
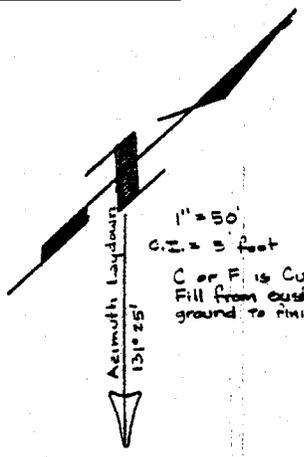
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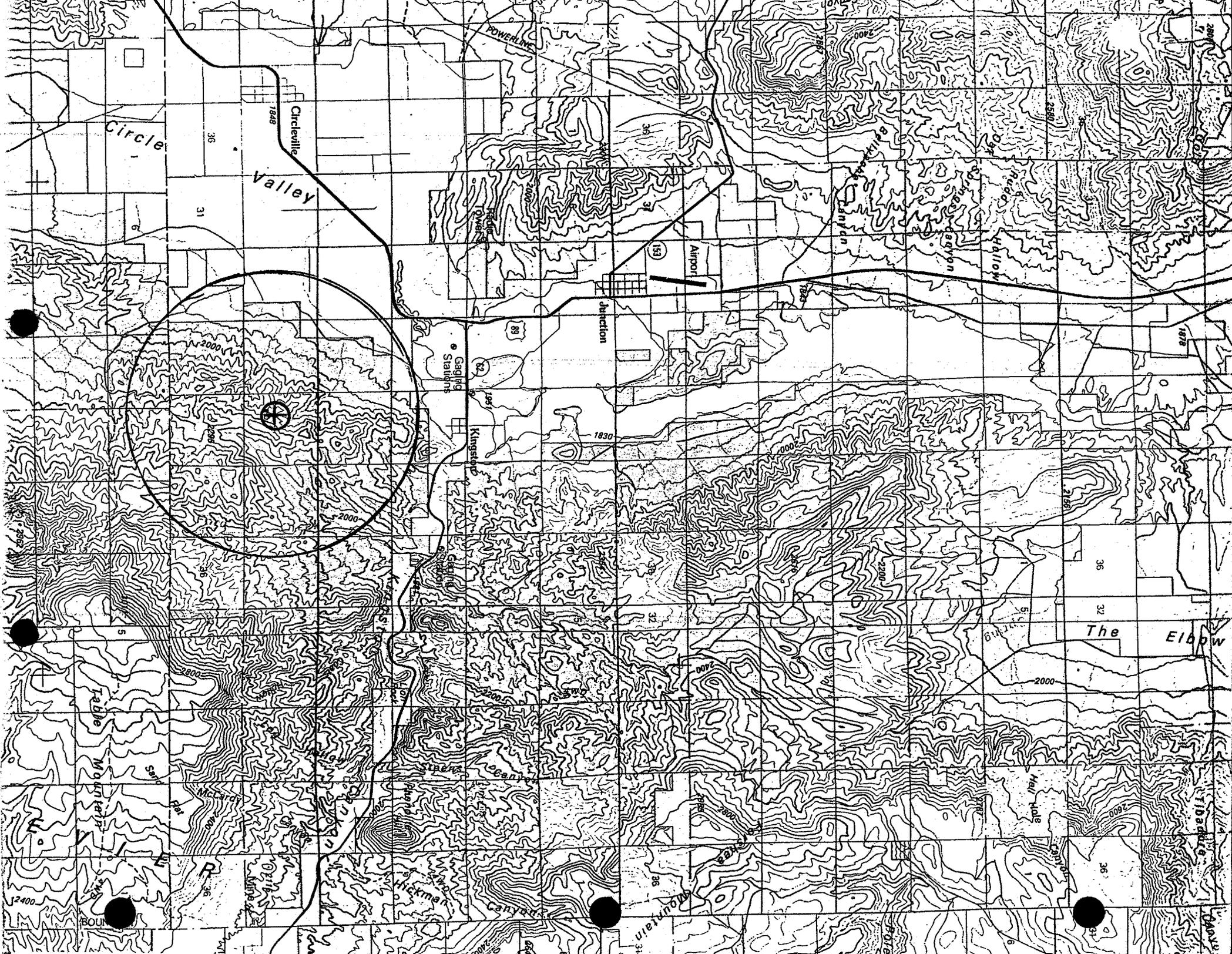
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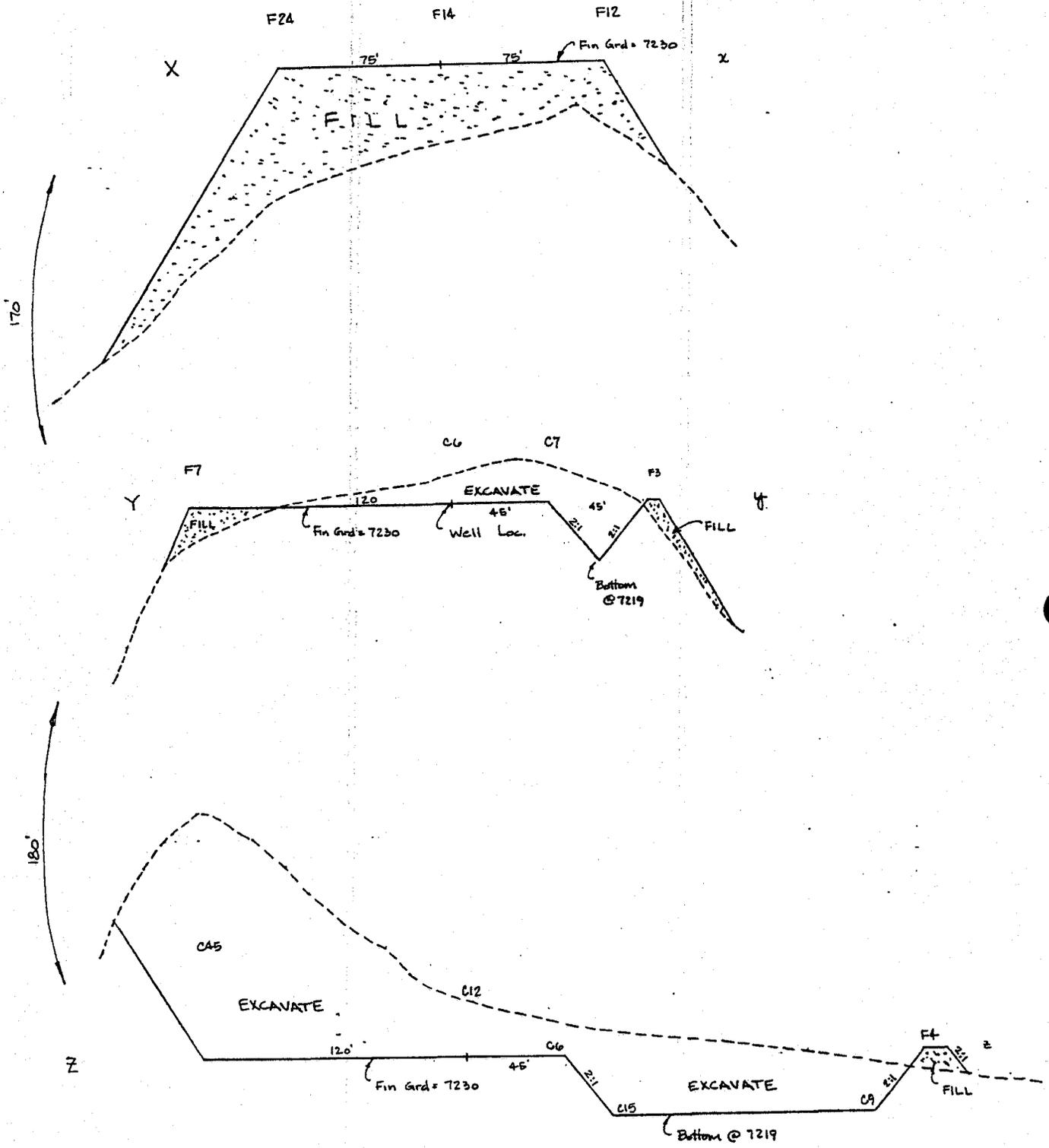


ARCO OIL & GAS CO.
 ROCKY FORD #1 (TABLE Mtn. PROSPECT)
 2030 FS 2 Sec. 27-T30S-R3W
 1045 FW
 PIUTE Co., UTAH

EXCESS MATERIAL

EXCESS MATERIAL





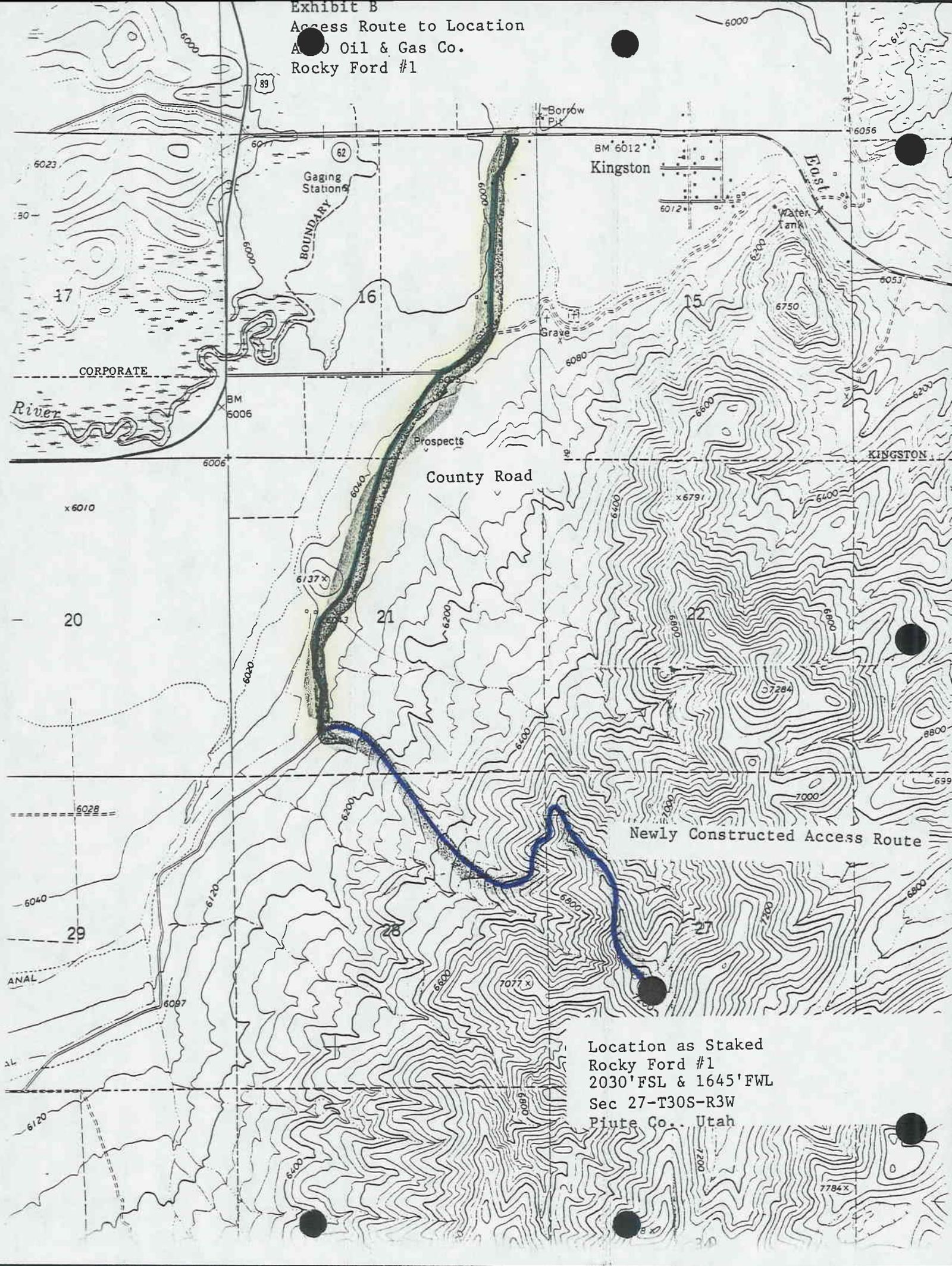
--- Existing ground
 — Proposed grade

Scales: 1" = 50' Horiz.
 1" = 20' Vert.

C or F is Cut or Fill from existing ground to finish grade.

All sideslopes @ 1.5:1 unless noted.

Exhibit B
Access Route to Location
A.O. Oil & Gas Co.
Rocky Ford #1



Location as Staked
Rocky Ford #1
2030' FSL & 1645' FWL
Sec 27-T30S-R3W
Piute Co., Utah

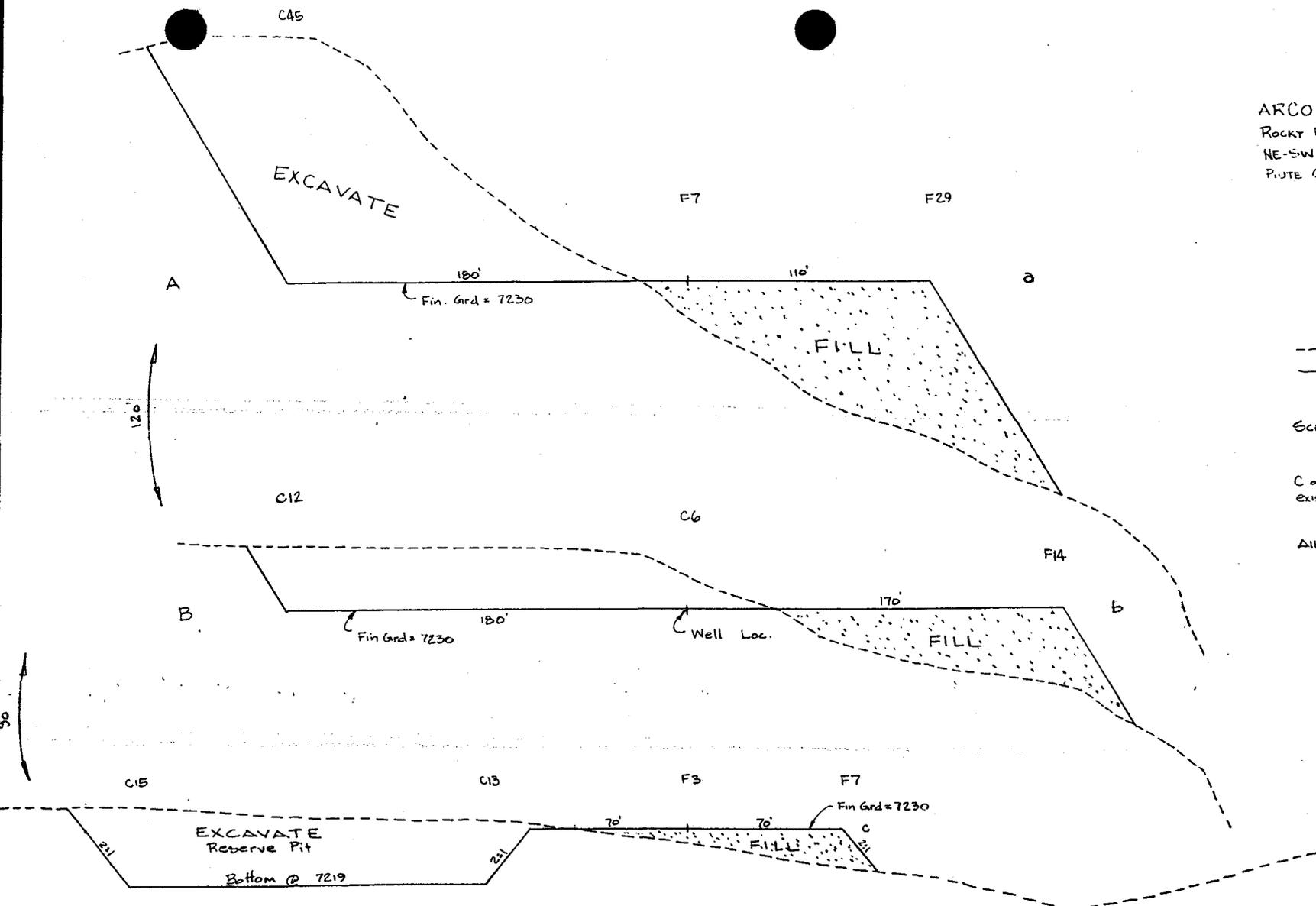
ARCO OIL & GAS CO.
 ROCKY FORD #1 (TABLE MTH. PROD.)
 NE-SW 27-30S-3W
 PIUTE Co., UT.

--- Existing ground
 — Proposed grade

Scales: 1" = 50' Horiz.
 1" = 20' Vert.

C or F is Cut or Fill from existing ground to finish grade.

All side slopes @ 1.5:1 unless noted



MARCH 26, 1984
 E.S.S.

POWERS ELEVATION CO.
 RICHFIELD, UT.

A. SAFETY EQUIPMENT PROVIDED BY ESSE INTERNATIONAL, INC.

- . Safety trailer with 10-380 C.F. cylinder cascade air supply system
- . 1000' low pressure air line hose with quick connects
- . 3 low pressure manifolds
- . 6 30 minute self contained breathing apparatus
- . 8 5 minute escape/work breathing apparatus
- . 2 Wind socks
- . 1 Resuscitator with spare O₂ cylinder
- . 1 36 unit first aid kit
- . 1 Eyewash kit
- . 1 Flare gun with shells
- . 1 Fire blanket
- . H2S Condition and warning signs - Briefing Area signs
- . 1 Fire extinguisher
- . 1 3 Channel monitor with two warning systems
- . 1 4 bottle auxiliary briefing area for refilling 30 minute SCBA
- . 2 Gastec hand held gas detectors with full range of H2S tubes
- . 1 Stretcher

NOTE:

ADDITIONAL EQUIPMENT WILL BE ADDED AS CONDITIONS REQUIRE.

B. TYPE OF EQUIPMENT AND STORAGE LOCATIONS

1. There will be eight SCOTT air line masks on location. Five (5) will be located on the rig floor. One (1) will be in the derrick. Two (2) will be on the mud tanks. Each air line mask will have an easily accessible air line hose.
2. There will be six 30 minute self contained breathing apparatus on location. They will be positioned as follows: 1 at Company Representative's trailer, 1 at tool pusher's trailer, 1 at Briefing Area # 1, 1 at Briefing Area # 2, 1 at rig dog house stairway and 1 at Geologist's trailer.
3. Briefing Area # 1 will also have the following equipment: 1-Resuscitator, 1-First aid kit (36 unit), 1-Stretcher and 1-20 lb. fire extinguisher.
4. A gastec pump type gas detector and tubes will be located in the dog house.
5. Fire blanket and Eye wash kit will be located in the dog house.

C. NOTE: There will be a maximum of 14 persons on location at any one time.

OPERATING PROCEDURES

A. BLOWOUT PREVENTION MEASURES DURING DRILLING

1. Blowout preventor requirements:

All BOP equipment shall meet the American Petroleum Institute's specifications as to materials acceptable for H₂S service. This equipment 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 H₂S bearing formation is to be drilled.

2. Drill string requirements:

All drill string components are to be of material that meet The American Petroleum Institute's specifications for H₂S 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.

B. GAS MONITORING EQUIPMENT

1. A continuous H₂S monitoring system with two or more H₂S detection heads will be in operation, one sampling from the shale shaker and one sampling from the bell nipple below the rotary table. A third sensor head, if used, will be located on the rig floor. All units should 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 H₂S reach 10 PPM and to trigger the alarm should the amount of H₂S reach 20 PPM. Any time it is necessary to deactivate the alarm (if H₂S is continuously present), a trained operator or H₂S supervisor will monitor the H₂S detection system.
2. When approaching or completing H₂S formations, crew members may attach 8 hour H₂S electronic personnel monitors to their person, if warranted.
3. Hand held H₂S sampling gas detectors will be used to check areas not covered by automatic monitoring equipment.

OPERATING PROCEDURES (cont'd.)

C. 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 with the completion foreman or contract tool pusher triggering the alarm. Reaction time will be checked from the time the alarm goes off until well is simulated closed in. Closing time should be under two minutes. A copy of the Operators/Contractors blowout drill procedures will be posted on the rig floor.

2. H2S Training and drills:

- A. H2S safety training will be given to all personnel at 1,000 feet above the expected H2S formation. The training sessions will cover, but will not be limited to, the following:
- a. General information on H₂S and SO₂ gas.
 - b. Hazards of these gases.
 - c. Safety equipment on location.
 - d. Proper use and care of personal protective equipment.
 - e. Operational procedures in dealing with H₂S gas.
 - f. Evacuation procedures.
 - g. Chemicals to be used in mud to control H₂S.
 - h. First aid, reviving an H₂S victim, toxicity, etc.
 - i. Buddy system (working in pairs).
 - j. Designated safe briefing areas (S.B.A.).
 - k. Regulations.
- B. H2S drills should be held on a surprise basis during drilling (or completion) and tripping operations. The drilling foreman or contract tool pusher will trigger the H2S alarm and crews will proceed to get the masks on, and secure well as per posted B.O.P. drill procedures.

OPERATING PROCEDURES (cont'd.)

a. When H₂S alarm is activated:

1. Mask up.
2. Raise tool joint above rotary table and shut down pump.
3. Close-in hydril.
4. Go to Safe Briefing Area.

3. Safety Equipment:

As outlined in the Safety Equipment index, H₂S safety protection equipment will be available to/or assigned each person on location and training given in correct usage, 1000' or 7 days prior to entering the first H₂S bearing formation.

OPERATING CONDITIONS

A Well Condition sign and flag will be posted on all access roads into the location.

A. DEFINITION OF WARNING FLAGS

1. Condition:

GREEN -- NORMAL OPERATIONS

2. Condition:

YELLOW -- POTENTIAL DANGER, CAUTION

a. Cause for condition:

- (1) Circulating up drilling breaks.
- (2) Trip gas after trip.
- (3) Circulating out gas on choke.
- (4) Poisonous gas present, but below threshold concentrations.
- (5) Coring.
- (6) Drill stem testing.

b. Safety action:

- (1) Check safety equipment and keep it with you.
- (2) Be alert for a change in condition.
- (3) Follow instructions.

3. Condition:

RED -- EXTREME DANGER

a. Cause for condition:

- (1) Uncontrolled flow from well with lethal concentrations of H₂S.

b. Safety action:

- (1) Mask up. All personnel will have protective breathing equipment with them. All personnel will stay in Safe Briefing Area unless instructed to do otherwise.
- (2) The decision to ignite the well is the responsibility of the operators on-site representative and should be made only as a last resort, when it is clear that:

OPERATING CONDITIONS (cont'd.)

- a. Human life is endangered.
 - b. There is no hope of controlling the well under prevailing conditions.
- (3) Order evacuation of local people within the danger zone. Request help from local authorities, State Police, Sheriff's Department, and Service Representative.

B. CIRCULATING OUT KICK

If it is suspected that H₂S is present with the gas, whenever a kick is taken, the driller's method or the wait & weight method of eliminating gas and raising the mud weight will be followed.

1. Driller's Method:

- a. The driller's method is maintaining sufficient back pressure on the annulus to keep any additional gas from coming into the hole while circulating the gas up.
- b. After the gas is eliminated, raise the mud weight and circulate around, maintaining back pressure on the annulus until the well is dead.
- c. If a kick has occurred, the standard blowout procedure will be followed and the driller's method will be used to kill the well. When the well has been put on the choke and circulating has been established, the following safety procedure must be established.
 - (1) Determine when gas is anticipated to reach surface.
 - (2) All non-essential personnel must be moved to safe briefing areas.
 - (3) All remaining personnel will check out and keep with them their protective breathing apparatus.
 - (4) Mud man will see that the proper amount of H₂S scavenging chemical is in the mud and record times checked.
 - (5) Make sure ignition flare is burning and valves are open to designated flare stacks or pits.

OPERATING CONDITIONS (cont'd.)

(6) Should anything develop where additional personnel are required, the operator's on-site representative will immediately proceed to Safe Briefing Area for necessary crew with protective breathing apparatus to assist.

2. Wait & Weight Method:

- a. Increase density of mud in pits to "kill" weight mud.
- b. Open choke and bring pump to initial circulating pressure (I.C.P.) by holding casing pressure at original valve only until pump is up to predetermined speed (S.P.M.)
- c. When initial circulating pressure is obtained on drill pipe, zero pump stroke counter and record time.
- d. Reduce drill pipe pressure from initial circulating pressure (I.C.P.) to final circulating pressure (F.C.P.) by using pump strokes and/or time according to graph.
- e. When "kill" weight mud is at the bit, hold final circulating pressure (F.C.P.) until kill weight mud is to surface.

If a kick has occurred, the standard blowout procedure will be followed and the wait and weight method will be used to kill the well. When the well has been put on the choke and circulation has been established, the following safety procedure must be established:

- a. Determine when gas is anticipated to reach surface.
- b. All non-essential personnel must be moved to safe briefing area.
- c. All remaining personnel will check out and keep with them their protective breathing apparatus.
- d. Mud men will see that the proper amount of H₂S scavenging chemical is in the mud and record times checked.
- e. Make sure ignition flare is burning and valves are open to designated flare stacks or pits.
- f. Should anything develop where additional personnel are required, the operator's on-site representative will immediately proceed to a Safe Briefing Area for necessary apparatus to assist.

OPERATING CONDITIONS (cont'd.)

C. CORING OPERATIONS IN H₂S BEARING ZONES

1. Personnel protective breathing apparatus should be worn from 10 to 20 stands in advance of retrieving the core barrel. Cores to be transported should be sealed and marked for the presence of H₂S.
 - a. Yellow caution flag will be flown at the well condition sign.
 - b. The No Smoking rule will be enforced.

D. DRILL STEM TESTING

1. Drill Stem Testing of Hydrogen Sulfide zones will be permitted in daylight hours only.
2. All non-essential personnel will be moved to a "Safe Briefing Area".
3. Put on air mask before formation fluids are expected at the surface and continue "MASK ON" until flares are lighted and work areas test no more than 10 PPM Hydrogen Sulfide and the area has been declared safe.
4. If warranted, the use of Ammonia Hydroxide, (26 Degree Beaume' Aqua Ammonia) for neutralizing the toxicity of Hydrogen Sulfide from drill string.
 - a. During drill stem tests, adequate Filming Amine for H₂S corrosion and Aqua Ammonia for neutralizing H₂S, will be on location.
5. The DST subsurface equipment will be suitable for H₂S service as recommended by the American Petroleum Institute.
6. The No Smoking rule will be enforced.
7. DST fluids will be circulated through a separator to permit flaring of gas. A continuous pilot light will be used.
8. A yellow or red flag will be flown at entrance to location depending on present gas condition.

CONSTANT DRILL PIPE PRESSURE METHOD (Driller's Method)

PRE-RECORDED INFORMATION

Kick control circ. press. at _____ stks/min. gpm _____ = _____ psi
 Casing size _____ grade _____ weight/ft. _____ shoe depth _____ ft.
 Maximum safe pressure on casing (use 80%) _____ psi.

WHEN KICK OCCURS:

1. WELL SHUT IN PROCEDURE:

- a. Stop pumps
- b. Open choke & valves thru manifold
- c. Close Hydril
- d. Close choke

2. MEASURE:

- a. Shut in drill pipe pressure _____ psi.
- b. Shut in casing pressure _____ psi.
- c. Pit volume increase _____ bbls.
- d. Determine depth of bit _____ feet

3. DETERMINE MUD WEIGHT REQUIRED TO BALANCE KICK.

- a. Calculate mud weight increase (Chart No. 1) _____ lbs/gal.
- b. Original mud weight _____ lbs/gal.
- c. Mud weight required (a+b) _____ lbs/gal.

4. DETERMINE INITIAL CIRCULATION PRESSURE:

- a. Kick control circulation pressure (From Above) _____ psi.
- b. Shut in drill pipe pressure (From 2a) _____ psi.
- c. 100 psi safety factor (50 psi in 20" csg). _____ psi.
- d. Total initial circulating pressure (a + b + c) _____ psi.

5. DETERMINE FINAL CIRCULATING PRESSURE:

- a. Total initial circulating pressure (From 4d) _____ psi.
- b. Shut in drill pipe pressure (From 2a) _____ psi.
- c. Total final & constant circulating pressure (a - b) _____ psi.

6. DETERMINE CIRCULATION TIMES AT KICK CONTROL RATES:

- a. Surface to bit travel time (Chart No.2) _____ min.
- b. Bit to surface travel time (Chart No.3) _____ min.
- c. Total circulation travel time (a + b) _____ min.

7. GRAPHICAL ANALYSIS: (Chart No. 4)

- a. Plot initial circulating pressure (From 4d) at time = 0 min.
- b. Plot final circulating pressure at surface to bit travel time.
- c. Connect the points then draw a line parallel to the time axis.

STEP BY STEP KILL PROCEDURES:

- 1. Circulate out all influx at initial circulating pressure and rate.
- 2. Raise mud weight in pits to required weight. (3c).
- 3. Kill well with new mud weight as per plotted pressure on Chart No. 4.
- 4. After kill, raise mud weight 0.3 ppg for trip margin.

Well No. _____ Date _____ Supervisor _____ Rig No. _____ Contractor _____

Chart 1

TRIP MARGIN
(Bottom Curve)

$$\Delta P = \frac{Y}{11.7 (D_h - D_p)} \text{ lb/gal}$$

Yield point lb/100 ft²

Hole, in.	D.P., in.	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30
12 3/4	5	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4
9 7/8	5	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5
8 3/4	4 1/2	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.6
7 7/8	4 1/2	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.8
6 3/4	4 1/2	0.1	0.2	0.2	0.3	0.4	0.5	0.5	0.6	0.7	0.7	0.8	0.9	1.0	1.1	1.1
6 3/4	3 1/2	0.1	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.5	0.6	0.7	0.7	0.8	0.8	0.9
6	2 7/8	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.7	0.7	0.8	0.8

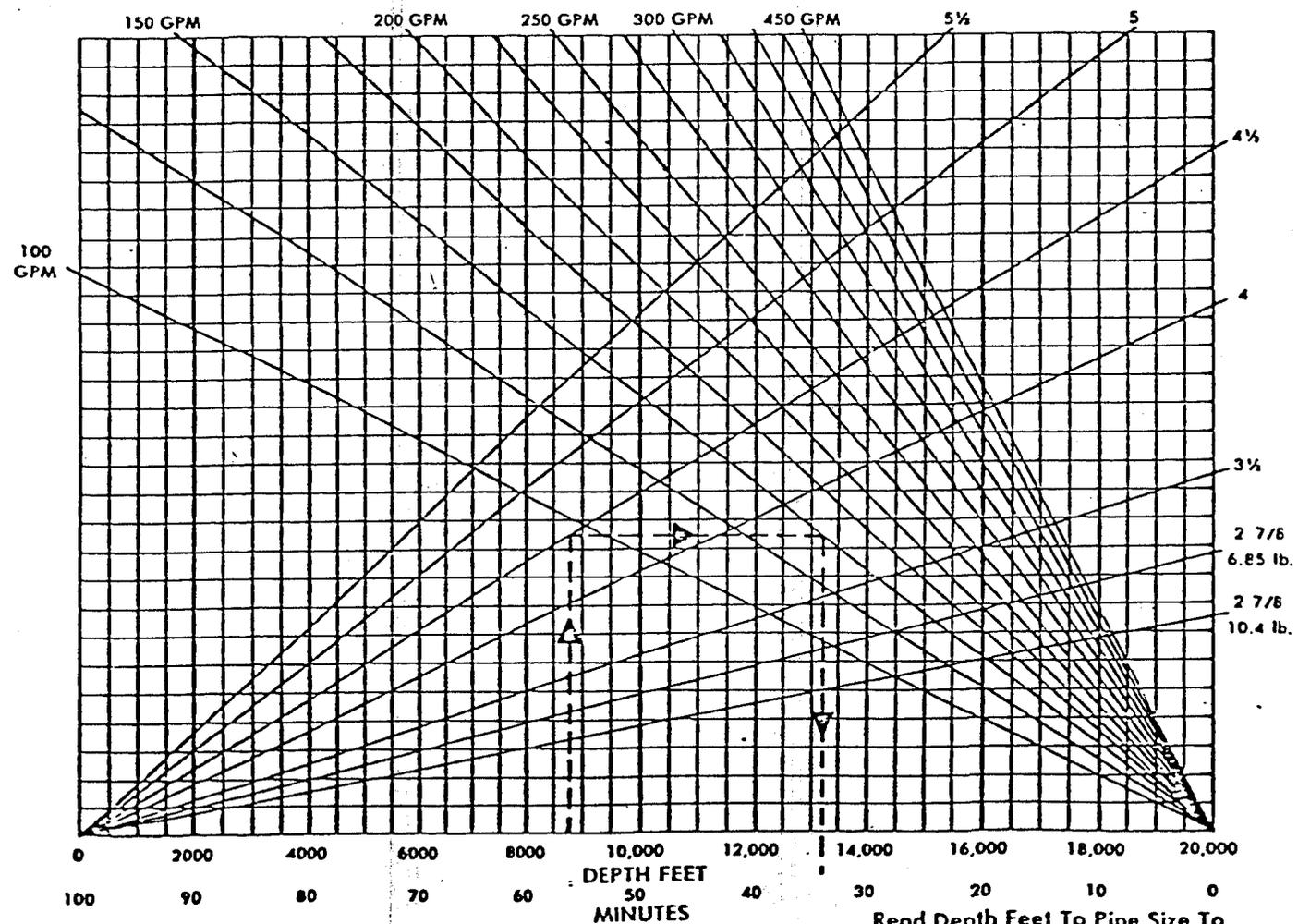
Chart 2

MUD WEIGHT INCREASE REQUIRED TO BALANCE A KICK (lb/gal)

$$\text{lb/gal. Increase} = \frac{\text{Shut in Drill Pipe Pressure} \times \text{SIDPP} \times 19.2}{\text{Depth} \times 0.052}$$

DEPTH (feet)	DRILL PIPE PRESSURE, PSI										psi
	100	200	300	400	500	600	700	800	900	1000	
1000	1.9	3.8	5.8	7.7	9.6	11.5	13.5	15.7	17.3	19.2	19.2
2000	1.0	1.9	2.9	3.8	4.8	5.8	6.7	7.7	8.6	9.6	9.6
3000	0.6	1.3	1.9	2.6	3.2	3.8	4.5	5.1	5.8	6.4	6.4
4000	0.5	1.0	1.4	1.9	2.4	2.9	3.4	3.8	4.3	4.8	4.8
5000	0.4	0.8	1.2	1.5	1.9	2.3	2.7	3.1	3.5	3.8	3.8
6000	0.3	0.6	1.0	1.3	1.6	1.9	2.3	2.6	2.9	3.2	3.2
7000	0.3	0.6	0.8	1.1	1.4	1.7	1.9	2.2	2.5	2.8	2.8
8000	0.2	0.5	0.7	1.0	1.2	1.4	1.7	1.9	2.2	2.4	2.4
9000	0.2	0.4	0.6	0.9	1.1	1.3	1.5	1.7	1.9	2.1	2.1
10000	0.2	0.4	0.6	0.8	1.0	1.2	1.3	1.5	1.7	1.9	1.9
11000	0.2	0.4	0.5	0.7	0.9	1.1	1.2	1.4	1.6	1.8	1.8
12000	0.2	0.3	0.5	0.6	0.8	1.0	1.1	1.3	1.4	1.6	1.6
13000	0.1	0.3	0.4	0.6	0.7	0.9	1.0	1.2	1.3	1.5	1.5
14000	0.1	0.3	0.4	0.6	0.7	0.8	0.9	1.1	1.2	1.4	1.4
15000	0.1	0.3	0.4	0.5	0.6	0.8	0.9	1.0	1.2	1.3	1.3
16000	0.1	0.2	0.4	0.5	0.6	0.7	0.8	1.0	1.1	1.2	1.2
17000	0.1	0.2	0.3	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.1
18000	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1.0	1.1	1.1
19000	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.0
20000	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.0

Chart 3



EMERGENCY PROCEDURES

A. The fact is to be instilled in the minds of all rig personnel that the sounding alarm means only one thing: H₂S IS PRESENT. Everyone is to proceed to his assigned station and the contingency plan is put into effect.

B. DRILLING CREW ACTIONS

1. All personnel will don their protective breathing apparatus. The driller will take necessary precautions as indicated in OPERATING PROCEDURES.
2. The Buddy system will be implemented. All personnel will act upon directions from the operator's on-site representative.
3. If there are non-essential personnel on location, they will move off location.
4. Entrance to the location will be patrolled, and the proper well condition flag will be displayed at the entrance to the location.

C. RESPONSIBILITIES OF PERSONNEL

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. The operator's on-site representative or his assistant.
2. Contract tool pusher. Should he become disabled.
3. ESSE International, Inc.'s representative.

D. In the event of an accidental release of a potentially hazardous volume of H₂S the following steps will be taken:

1. Contact by the quickest means of communications:
The main offices of Oil Company & Contractor as listed on the following page.
2. An assigned crew member will blockade the entrance to the location. No unauthorized personnel will be allowed entry into the location.
3. The operator's on-site representative will remain on location and attempt to regain control of the well.

COMPANY & CONTRACT PERSONNEL

1. Company Personnel:

ARCO OIL & GAS COMPANY
717 17th Street
P.O. Box 5540
Denver, Colorado 80217
(303) 293-4600

- 1) J.M. (Jack) McCarthy - District Drilling Superintendent
Office (303) 293-7069
Home (303) 575-1339
 - 2) Tom Webster - Drilling Supervisor
Office (303) 293-7037
Home (303) 575-1341
 - 3) Bill Sartain - Drilling Supervisor
Office (303) 293-7035
Home (303) 575-1340
 - 4) Tom Danielsen - Senior Drilling Engineer
Office (303) 293-7185
Home (303) 794-4949
 - 5) Kwang Park - District Drilling Engineer
Office (303) 293-7102
Home (303) 575-1345
 - 6) Sandy Stash - Drilling Engineer
Office (303) 293-7184
Home (303) 979-8573
 - 7) Harry Engel - Drilling Engineer
Office (303) 293-7305
Home (303) 986-7303
 - 8) Larry Bell - Safety and Training Coordinator
Office (303) 293-7088
Home (303) 989-4101
 - 9) A.B. (Bud) Parker - Director of Environment & Safety
Office (303) 293-1061
Home (303) 770-4284
 - 10) John Calder III - Environmental Coordinator
Office (303) 293-7028
Home (303) 979-7352
 - 11) Suzanne Barnes (303) 293- 1077
- In the event of an uncontrolled blowout, the following person has the authority to ignite the well.
- J.M. McCarthy - District Drilling Superintendent
Office.....(303) 293-7069
Home.....(303) 575-1339

EMERGENCY PROCEDURES (cont'd.)

4. The Drilling Company's rig superintendent will begin evacuation of those persons in immediate danger. He will begin by telephoning residents in the danger zone.

In the event of no contact by telephoning, the tool pusher will proceed at once to each dwelling for a person-to-person contact. In the event the tool pusher cannot leave the location, he will assign a responsible crew member to proceed in the evacuation of local residents. Upon arrival, the Sheriff's Department and ESSE International personnel will aid in further evacuation.

E. LEAK IGNITION

Leak Ignition procedure: (used to ignite a leak in the event it becomes necessary to protect the public)

1. Two men, the operator's on-site representative and the contractor's rig superintendent or ESSE International's representative, wearing self-contained pressure demand air masks must determine the perimeter of the flammable area. This should be done with one man using an H₂S detector and the other one using a flammable gas detector. The flammable perimeter should be established at 30% to 40% of the lower flammable limits.
2. After the flammable perimeter has been established and all employees and citizens have been removed from the area, the ignition team should move to the up-wind area of the leak perimeter and fire a flare into the area. If the leak isn't ignited on the first attempt, move in 20 to 30 feet and fire again. Continue moving in and firing until the leak is ignited or the flammable gas detector indicates the ignition team is moving into hazardous area (75-80% of lower flammable limits.) If trouble is incurred in igniting the leak by firing toward the leak, try firing 40° to 90° to each side of the area where you have been firing. If still no ignition is accomplished, ignite the copper line burner and push it into the leak area. This should accomplish ignition. If ignition is not possible due to the makeup of the gas, the toxic leak perimeter must be established and maintained to insure evacuation is completed and continued until the emergency is secure.

EMERGENCY PROCEDURES (cont'd.)

3. The following equipment and man-power will be required to support the ignition team:
 - a. One 25 mm type flare gun or one sawed-off 12-gauge shotgun, or one 12 gauge flare pistol.
 - b. Four pressure demand air packs.
 - c. Two 250' lengths of 3/8" nylon rope tied to the ignition teams waists.
 - d. Two men in a clear area equipped with air packs, who are capable of rescuing the ignition team.
 - e. Portable butane bottle with 100' of copper line attached to a burner.

F. 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".
2. In the case of an emergency, personnel will assemble in the upwind "SAFE BRIEFING AREA" as per prior instructions from the operator's representative.
3. The H₂S "SAFETY" trailer provided by ESSE International, Inc. will contain 10-380 C.F. cylinders, a resuscitator, one 30 minute air pack, and will have a wind sock or streamer to indicate wind direction.
4. Two other wind socks will be installed so as to be visible from all parts of the location.
5. A condition warning sign will be displayed at the location entrances of current operating conditions.
6. A list of emergency telephone numbers will be kept on rig floor, contract tool pusher's trailer, the Oil Company's trailer and in "SAFETY" trailer.
7. Two barricades will be available to block the entrance to location should an emergency occur.

EMERGENCY PROCEDURES (cont'd.)

8. An undulating high and low pitch siren will be installed in the derrick "A" leg.
9. An explosion proof bug blower (fan) will be installed under the rig floor to disperse possible accumulations of H₂S. This blower will be provided by ESSE International, Inc. and delivered to the rig. However, due to the many various types of electrical connections in use, it will be the responsibility of the operator to provide the proper electrical hookup to the rig power source.

LIST OF APPENDICES

APPENDIX I.....EMERGENCY & MEDICAL FACILITIES

APPENDIX II.....LAW ENFORCEMENT AGENCIES & FIRE FIGHTING FACILITIES

APPENDIX III.....GOVERNMENTAL AGENCIES

APPENDIX IV.....RADIO & T.V. STATIONS

APPENDIX V.....AIR SERVICE & MOTELS/HOTELS

APPENDIX I

EMERGENCY & MEDICAL FACILITIES

1-801-896-6471

Utah Highway Patrol

Ambulance Service:

Garfield County Ambulance
200 No 200 E.
Panguitch, Utah.....801/676-2411
Piute County Ambulance.....1-800-662-5151
LIFE FLIGHT - Air Ambulance
Salt Lake City, Utah
(Needs to be called in by Hospital.....801/676-8811

Hospital:

Garfield Memorial Hospital
200 N 400E
Panguitch, Utah.....801/676-8811

Doctors in the Area:

E. Terry Henrie
200 N 400 E
Day Phone.....801/676-8842 Night Phone...801/676-8811
Thomas T. Marshall
200 N 400 E
Day Phone.....801/676-8842 Night Phone...801/676-8811

Veterinary Clinic:

Urie Animal Clinic
Dr. Urie Clinic Phone.....801/896-4913
Home Phone.....801/896-4282
Sevier Valley Animal Hospital.....801/896-4327

A P P E N D I X I I

LAW ENFORCEMENT AND FIRE FIGHTING FACILITIES

Sheriff Department
Piute County, Utah
Brent Gotterson

Night Phone for Sheriff 801-577-2893
801-896-6471

Utah Highway Patrol
Day or Night 801-896-6471

Police Department
Circleville, Utah
801-577-2531

Ambulance
1-800-662-5151

Fire Department
Circleville, Utah
801-577-2839 801-577-2951

A P P E N D I X I I I

GOVERNMENTAL AGENCIES

National Response Center
Washington, D.C.
(24 hour phone) 1-800-424-8802

U.S. Environmental Protection Agency
Regional Response Center
1860 Lincoln Street
Denver, Colorado 80295
(24 hour phone) 303-837-3880

Department of Environmental Quality
Water Quality Division
1111 East Lincoln Way
Cheyenne, Wyoming 82002
(24 hour phone) 307-777-7781

Oil Gas & Mining Division of Utah
4241 State Office Bldg.
Salt Lake City, Utah 84114
801-533-5771

Bureau of Land Management
Sevier River Resource Area
Richfield, Utah 84701
801-896-8221
Mr. Rod Lister

APPENDIX IV

RADIO AND T.V. STATIONS

KSVC Radio Station
450 E. 4th St.
Richfield, Utah.....801/896-4456

KARE AM-FM Radio
2865 W. Midvalley Rd.
Cedar City, Utah.....801/586-5273

APPENDIX V

AIR SERVICE & MOTELS/HOTELS

Air Service:

Cedar City Municipal Airport
Cedar City, Utah.....801/586-3033

Air West Airlines
Cedar City Municipal Airport
Cedar City, Utah.....801/586-3033

Motels/Hotels:

Country Motel
Circleville, Utah.....801/577-2839

Junction Motel
Junction, Utah.....801/577-2667

NO RESIDENCE WITHIN A 2 MILE RADIUS

Land and Livestock Owners Within a 2 Mile Radius:

1. Merrill Allen
550 South 600 West
Kingston, Utah 84743
801-577-2836
2. Raymond Whittaker
495 North 500 West
Richfield, Utah 84723
801-896-6772
3. Reed Allen
Kingston, Utah 84743

T30S R3W

Sec. 16, N $\frac{1}{2}$ of SE $\frac{1}{4}$	Merrill Allen
Sec. 15, NW $\frac{1}{4}$ of SW $\frac{1}{4}$	Merrill Allen
Sec. 14	BLM
Sec. 20, S $\frac{1}{2}$ of SE $\frac{1}{4}$	Earl Whittaker
Sec. 21, W $\frac{1}{2}$ and NE $\frac{1}{4}$ of NW $\frac{1}{4}$, W $\frac{1}{2}$ of SW $\frac{1}{4}$	Reed Allen
Sec. 22	BLM
Sec. 23	BLM
Sec. 24	BLM
Sec. 25	BLM
Sec. 26	BLM
Sec. 27	BLM
Sec. 28, NW $\frac{1}{4}$ of NW $\frac{1}{4}$ - Raymond Whittaker, Balance of Section - BLM	
Sec. 29, N $\frac{1}{2}$ of NE $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ of NE $\frac{1}{4}$	Raymond Whittaker
Sec. 32, E $\frac{1}{2}$ and N $\frac{1}{2}$ of SW $\frac{1}{4}$	Pub. Water Resv.
Sec. 33	BLM
Sec. 34	BLM
Sec. 35	BLM
Sec. 36	Pub. Water Resv.

T31S R3W

Sec. 2	Dixie Nat. For.
Sec. 3	BLM
Sec. 4	BLM
Sec. 5	BLM

HYDROGEN SULFIDE

A deadly enemy of those people employed in the petroleum industry, this gas can paralyze or kill quickly. At least part of the answer lies in education in the hazards, symptoms, characteristics, safe practices, treatment, and the proper use of personal protective equipment.

Hydrogen Sulfide Hazards

The principal hazard to personnel is asphyxiation or poisoning by inhalation. Hydrogen Sulfide is a colorless, flammable gas having an offensive odor and a sweetish taste. It is highly toxic and doubly hazardous because it is heavier than air (specific gravity = 1.19). Its offensive odor, like that of a rotten egg, has been used as an indicator by many old timers in the oil fields, but is not a reliable warning of the presence of gas in a dangerous concentration because people differ greatly in their ability to detect smells. Where high concentrations are encountered, the olfactory nerves are rapidly paralyzed, denuding the sense of smell as a warning indicator. A concentration of a few hundredths of one percent higher than that causing irritation, can cause asphyxia and death - in other words, there is a very narrow margin between consciousness and unconsciousness, and between unconsciousness and death.

Where high concentrations cause respiratory paralysis, spontaneous breathing does not return unless artificial respiration is applied. Although breathing is paralyzed, the heart may continue beating for ten minutes after the attack.

Physiological Symptoms

Acute: Results in almost instantaneous asphyxia, with seeming respiratory paralysis. Acute poisoning, or strangulation, may occur after even a few seconds inhalation of high concentrations and results in panting respiration, pallor, cramps, paralysis and almost immediate loss of consciousness with loss of speech, and no other warning than a cry. Death may follow with extreme rapidity from respiratory and cardiac paralysis. One breath of a sufficiently high concentration may have this result.

Subacute: Results in irritation, principally of the eyes, persistent cough, tightening or burning in the chest and skin irritation followed by depression of the central nervous system. The eye irritation ranges in severity from mild conjunctivitis to swelling and bulging of the conjunctiva, photophobia (abnormal intolerance of light) and temporary blindness.

Treatment

1. Victim should be removed to fresh air immediately by rescuers wearing respiratory protective equipment. Protect yourself while rescuing.
2. If the victim is not breathing, begin immediately to apply artificial respiration. If a resuscitator is available, let another employee get it and prepare for use.
3. Treat for shock, keep victim warm and comfortable.
4. Call a doctor. In all cases, victims of poisoning should be attended by a physician.

Characteristics of H₂S

1. Extremely toxic.
2. Heavier than air. Specific gravity = 1.19.
3. Colorless, has odor of rotten eggs.
4. Burns with a blue flame and produces Sulphur Dioxide (SO₂) gas, which is very irritating to eyes and lungs. The SO₂ is also toxic and can cause serious injury.
5. H₂S forms explosive mixture, with air between 4.3% and 46% by volume.
6. H₂S is almost as toxic as hydrogen cyanide.
7. Between 5 and 6 times as toxic as carbon monoxide.
8. Produces irritation to eyes, throat and respiratory tract.
9. Threshold Limit Value (TLV) maximum of eight hours exposure without protective respiratory equipment - 20 PPM.

Safe Practices

If you are faced with an H₂S problem in your operations, the following safe practices are recommended:

1. Be absolutely sure all concerned are familiar with the hazards concerning H₂S and how to avoid it.
2. All employees should know how to operate and maintain a resuscitator and respiration equipment.
3. Be able to give and demonstrate artificial respiration.
4. Post areas where there is poisonous gas with suitable warning signs.

5. Be sure all new employees are thoroughly schooled before they are sent to the field -- tomorrow may be too late.
6. Teach men to avoid gas whenever possible - work on the windward side, have fresh air mask available.
7. Never let bad judgement guide you - wear respiratory equipment when gauging tanks, etc. Never try to hold your breath in order to enter a contaminated atmosphere.
8. In areas of high concentration, a two-man operation is recommended.
9. Never enter a tank, cellar or other enclosed place where gas can accumulate without proper respiratory protective equipment and a safety belt secured to a life line held by another person outside.
10. Always check out danger areas first with H₂S detectors before allowing anyone to enter. Do not try to determine the presence of gas by its odor.
11. Wear proper respiratory equipment for the job at hand. Never take a chance with equipment with which you are unfamiliar. If in doubt, consult your supervisor.
12. Carry out practice drills every month with emergency and maintenance breathing equipment. Telling or showing a group how to operate equipment is not enough - make them show you.
13. Maximum care should be taken to prevent the escape of fumes into the air of working places by leaks, etc.
14. Communications such as radios and telephones should be provided for those people employed where H₂S may be present.

DO YOU KNOW

THERE IS NO TIME TO WASTE

WHEN BREATHING STOPS!

RESCUE BREATHING MUST

BE STARTED FAST!!

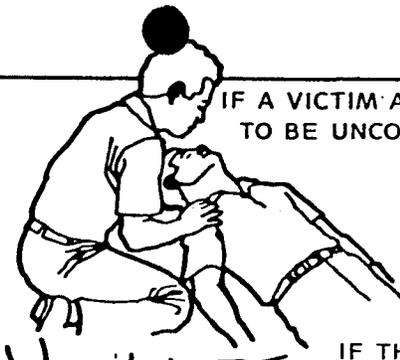
After Breathing is Stopped for:	The Chances for Life are:
1 Minute	98 out of 100
2 Minutes	92 out of 100
3 Minutes	72 out of 100
4 Minutes	50 out of 100
5 Minutes	25 out of 100*
6 Minutes	11 out of 100*
7 Minutes	8 out of 100*
8 Minutes	5 out of 100*
9 Minutes	2 out of 100*
10 Minutes	1 out of 100*
11 Minutes	1 out of 1,000*
12 Minutes	1 out of 10,000*

* Authorities State:
Irreparable brain damage starts at about fifth minute.

LEARN HOW TO USE

LIFE SAVING EQUIPMENT

WHEN BREATHING STOPS



IF A VICTIM APPEARS TO BE UNCONSCIOUS TAP VICTIM ON THE SHOULDER AND SHOUT, "ARE YOU OKAY?"



IF THERE IS NO RESPONSE

TILT THE VICTIM'S HEAD, CHIN POINTING UP. Place one hand under the victim's neck and gently lift. At the same time, push with the other hand on the victim's forehead. This will move the tongue away from the back of the throat to open the airway.



IMMEDIATELY LOOK, LISTEN, AND FEEL FOR AIR

While maintaining the backward head tilt position, place your cheek and ear close to the victim's mouth and nose. Look for the chest to rise and fall while you listen and feel for the return of air. Check for about 5 seconds.



IF THE VICTIM IS NOT BREATHING

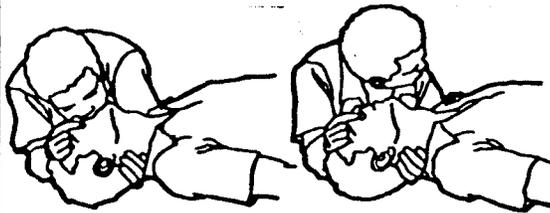
GIVE FOUR QUICK BREATHS.

Maintain the backward head tilt, pinch the victim's nose with the hand that is on the victim's forehead to prevent leakage of air, open your mouth wide, take a deep breath, seal your mouth around the victim's mouth, and blow into the victim's mouth with four quick but full breaths just as fast as you can. When blowing, use only enough time between breaths to lift your head slightly for better inhalation. For an infant, give gentle puffs and blow through the mouth and nose and do not tilt the head back as far as for an adult.



If you do not get an air exchange when you blow, it may help to reposition the head and try again.

AGAIN, LOOK, LISTEN, AND FEEL FOR AIR EXCHANGE.

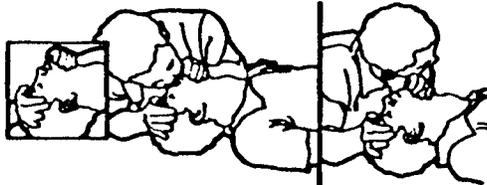


IF THERE IS STILL NO BREATHING

CHANGE RATE TO ONE BREATH EVERY 5 SECONDS FOR AN ADULT.

FOR AN INFANT, GIVE ONE GENTLE PUFF EVERY 3 SECONDS.

MOUTH-TO-NOSE METHOD



The mouth-to-nose method can be used with the sequence described above instead of the mouth-to-mouth method. Maintain the backward head-tilt position with the hand on the victim's forehead. Remove the hand from under the neck and close the victim's mouth. Blow into the victim's nose. Open the victim's mouth for the look, listen, and feel step.



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THE USE OF SELF-CONTAINED BREATHING EQUIPMENT

1. Written procedures shall be prepared covering safe use of respirators in dangerous atmospheres which might be encountered in normal operations or in emergencies. Personnel shall be familiar with these procedures and the available respirators.
2. Respirators shall be inspected frequently at random to insure that they are properly used, cleaned and maintained.
3. Anyone who may use the respirators shall be trained in how to insure proper face piece to face seal. They shall wear respirators in normal air and then wear it in a test atmosphere. (Note: Such items as facial hair (beard or sideburns) and eyeglass temple pieces will not allow a proper seal). Anyone that may be reasonably expected to wear respirators should have these items removed before entering a toxic atmosphere. A special mask must be obtained for anyone who must wear eyeglasses.
4. Maintenance and care of respirators:
 - A. A program for maintenance and care of respirators shall include the following:
 - (1) Inspection for defects, including leak checks.
 - (2) Cleaning and disinfecting.
 - (3) Repair.
 - (4) Storage.
 - B. Inspection: Self-contained breathing apparatus for emergency use shall be inspected monthly for the following and a permanent record kept of these inspections:
 - (1) Fully charged cylinders.
 - (2) Regulator and warning device operation.
 - (3) Condition of face piece and connections.
 - (4) Elastomer or rubber parts shall be stretched or massaged to keep them pliable and prevent deterioration.
 - C. Routinely used respirators shall be collected, cleaned and disinfecting as frequently as necessary to insure proper protection is provided.

5. Person assigned task that requires using self-contained breathing equipment shall be certified physically fit for breathing equipment usage by the local company physician at least annually.
6. Respirators should be worn when:
 - A. Any employee works near the top or on top of any tank unless test reveals less than 20 PPM of H₂S.
 - B. When breaking out any line where H₂S can reasonably be expected.
 - C. When sampling air in areas to determine if toxic concentrations of H₂S exist.
 - D. When working in areas where over 20 PPM H₂S has been detected.
 - E. At any time there is a doubt as to the H₂S level in the area to be entered.



**INSTRUCTION MANUAL
FOR USE OF SCOTT
SKA-PAK® EMERGENCY
ESCAPE UNIT

P/N 900055 SERIES**

SECTION I

DESCRIPTION AND APPLICATION

WARNING: IMPROPER USE OF THIS APPARATUS IN A HAZARDOUS ATMOSPHERE MAY RESULT IN INJURY OR DEATH. PERSONNEL SHOULD RECEIVE ADEQUATE TRAINING PRIOR TO USE.

The Scott Ska-Pak provides instant emergency respiratory protection for anyone suddenly exposed to an atmosphere immediately dangerous to life or health. This lightweight, compact unit is available in two basic configurations; a 5-minute self-contained air supply for escape only, and a combination 5-minute self-contained air supply for escape and Type C supplied-air respirator used for entry into areas immediately dangerous to life or health. The combination self-contained and supplied-air unit is available in demand and positive pressure models. All demand models can be supplied with either a half facepiece or the Scottoramic® full facepiece, while the positive pressure models are available with the Scottoramic full facepiece only.

The Scottoramic facepiece model is designed for use where

full face protection is necessary or desirable. The half facepiece is for use where integral eye protection is not required.

OPERATION

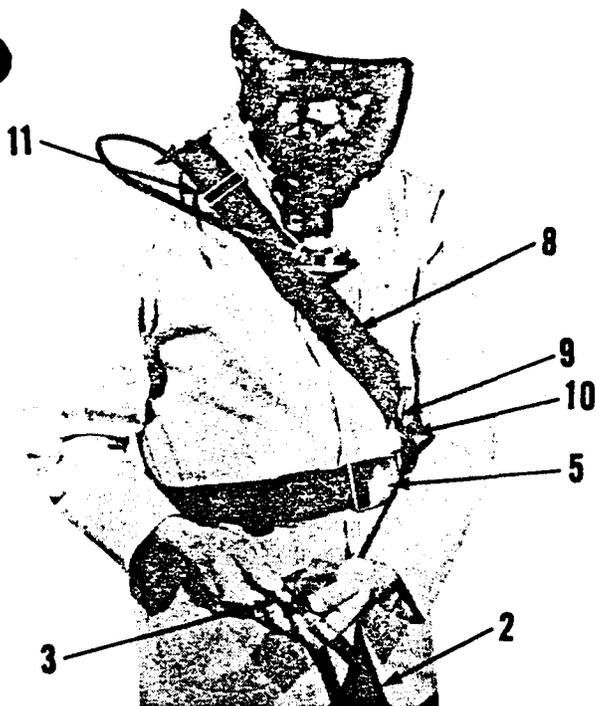
Ska-Pak cylinder air, with a 5-minute rated duration, is for emergency egress only. With the unit connected to, and operating from an external air supply, it is permissible to enter areas immediately dangerous to life or health. The hoseline system is designed to operate with an inlet supply of 60 to 125 psig, with hoseline lengths between 10 feet and 250 feet.

Some Ska-Pak models are available with a life-sustaining "Breakaway" hose coupling which releases with a 100 lb. pull. This enables the user to move rapidly toward the nearest exit in the event of an imminent explosion, fire or other emergency where seconds can mean the difference between life and death.

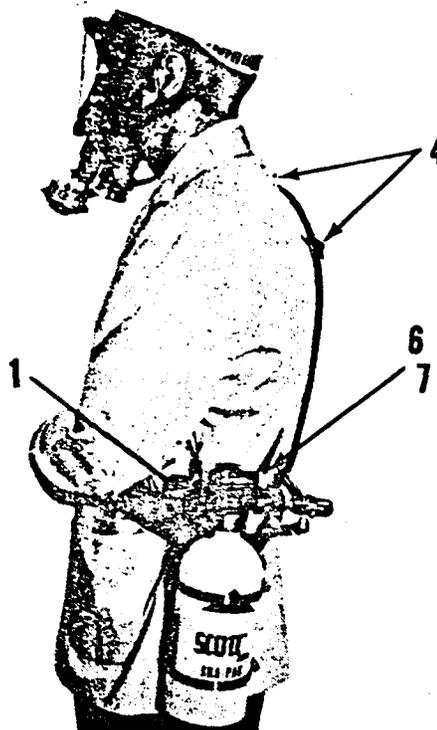
APPROVALS: TC-13F-66 for 900055-01, -03 and -04
TC-13F-67 for 900055-09, -10, -17 and -18
TC-13F-68 for 900055-13 and -14

Approved units meet the requirements of 30 CFR Part 11.

Go for safety, first... go SCOTT



(FRONT VIEW)



(REAR VIEW)

FIGURE 1
P/N 900055-13 Ska-Pak

TABLE I

	PART NUMBER ¹	REGULATOR ASSY TYPE	FACEPIECE TYPE	DISCONNECT TYPE	BREAKAWAY HOSE	SUPPLY HOSE ³	NIOSH/MESA APPROVAL NO. ⁴
EGRESS ONLY UNITS	900055-01 ²	Demand	Half	None	None	None	TC-13F-66
	900055-02	Demand	Duo-Seal®	None	None	None	
	900055-03	Demand	Half	None	None	None	
	900055-04 ²	Demand	Scottoramc	None	None	None	
ENTRY/EGRESS UNITS	900055-05	Demand	Duo-Seal	Hansen	None	30010-	TC-13F-67 TC-13F-67 TC-13F-68 TC-13F-68 TC-13F-67 TC-13F-67
	900055-06	Demand	Duo-Seal	Schrader	None	30020-	
	900055-07	Demand	Duo-Seal	Hansen	Yes	30010-	
	900055-08	Demand	Duo-Seal	Schrader	Yes	30020-	
	900055-09	Demand	Scottoramc	Hansen	None	30010-	
	900055-10	Demand	Scottoramc	Schrader	None	30020-	
	900055-11	Demand	Scottoramc	Hansen	Yes	30010-	
	900055-12	Demand	Scottoramc	Schrader	Yes	30020-	
	900055-13	Pressure-Demand	Scottoramc	Hansen	None	30010-	
	900055-14	Pressure-Demand	Scottoramc	Schrader	None	30020-	
	900055-15	Pressure-Demand	Scottoramc	Hansen	Yes	30010-	
	900055-16	Pressure-Demand	Scottoramc	Schrader	Yes	30020-	
	900055-17	Demand	Half	Hansen	None	30010-	
	900055-18	Demand	Half	Schrader	None	30020-	
	900055-19	Demand	Half	Hansen	Yes	30010-	
	900055-20	Demand	Half	Schrader	Yes	30020-	

NOTES:

- ¹ All Ska-Pak units include 7 cu. ft. aluminum cylinder.
- ² These units supplied with single strap harness; all others are supplied with waist and shoulder harness, P/N 802200-01.
- ³ Hose lengths are supplied as required. NIOSH/MESA approved lengths per dash configuration are 10 ft. minimum, 250 ft. maximum.
- ⁴ Approved units meet the requirements of 30 CFR Part 11.

SECTION II

OPERATING INSTRUCTIONS

NOTE

The following instructions include the harness assembly and the supply hose (see Table I and figure 1).

1. Don the harness assembly (refer to Section III) or the single strap harness.
2. Check that the cylinder valve knob (1, figure 1) is adjusted fully clockwise to its closed position. Push valve handle inward and turn clockwise.
3. Connect supply hose (2) to the respirable air supply, and mate hose assembly (3) to supply hose (2) as follows:
 - a. Hansen fitting mating (see figure 5).
 - (1) Line up slight recess (drill point) in socket body "A" with the semi-circular cutout in spring loaded socket "B".
 - (2) Slide spring loaded socket "B" back on supply hose; insert coupling "C" into socket body "A", and release socket "B".
 - (3) Rotate socket "B"; locking coupling "C" in place.

NOTE

To uncouple, rotate socket "B" until socket body "A" and socket "B" are lined up (refer to step 1); slide socket "B" back and remove coupling "C". Release socket "B".

- b. Schrader fitting mating (see figure 6).
 - (1) Insert coupling "C" into socket body "A".

NOTE

To uncouple, rotate socket "B", remove coupling "C" and release socket "B".

4. Bring mask and hose assembly over shoulder (see figure 1) and secure hose assembly in place with webbing loops (4).
5. Don appropriate mask (refer to Section III).
6. Turn the cylinder valve knob (1) counterclockwise to its open position if external air supply fails or when disconnecting from the supply.

SECTION III

DONNING PROCEDURE WHEN USING 802200-01 HARNESS ASSEMBLY

1. Don the harness assembly as follows:
 - a. Unbuckle waist belt (5, figure 1).
 - b. Snap clip (6) of shoulder strap (8) into "D" ring (7).
 - c. Snap clip (9) of shoulder strap (8) into "D" ring (10).
 - d. Unsnap webbing loops (4).
 - e. Place shoulder strap (8) over right shoulder.
 - f. Adjust and secure waist belt (5). Pass tongue of waist belt through the loop on belt.
 - g. Adjust shoulder strap (8) as required at slide (11) to allow waist belt (5) to be at waist level.

2. Don Scottoramic facepiece (figure 2) as follows:
 - a. Adjust the straps of the facepiece harness full out.
 - b. Don facepiece chin first, then pull down and center the harness on back of head.
 - c. Adjust the bottom straps first, then the middle pair of straps. In most cases, the top head strap will be tight on the full out position.
3. Don Scott half facepiece (figure 3) as follows:
 - a. Adjust the bottom straps of the facepiece full out.
 - b. Don the facepiece, place the upper strap above the ears to the top of the head and attach the hooks to the eyes on the low strap.
 - c. Adjust the straps as required for proper seal.
4. Don the pressure-demand units (figure 4) using one of the following procedures:
 - a. If the unit is connected to a respirable air supply prior to donning the facepiece, a constant flow of air will be present in the facepiece. As the Scottoramic facepiece is donned as noted in step 2 above, the air flow will subside. It will cease once the facepiece is fitted to the face. A slight positive pressure (+1.5 inches of water pressure max.) inside the facepiece will prevent any external contaminated environment from entering the system.
 - b. An alternate method may also be used. If desirable, the facepiece may be donned prior to connecting to the air supply. No air will flow to the unit until the air supply connection is completed. If this method of donning is used, the user must hold his breath until the connection is completed.

NOTE

Due to an unlimited supply of air in a hoseline system, the Pressure-Demand Ska-Pak is not fitted with an additional "ON-OFF" provision other than the Quick Disconnect.

SECTION IV

MAINTENANCE

NOTE

The following procedures should be performed following each use.

1. Carefully inspect the unit for defects, such as rips or tears in the mask or hoses, loose or damaged fittings and damaged head harness, which might render the unit inoperable.
2. Prior to cleaning and disinfecting the mask, remove the regulator and exhalation valve as follows:
 - a. On all units, unthread the regulator at the knurled fitting.
 - b. On pressure-demand units, remove the clamp securing the exhalation valve to the mask. Carefully remove the exhalation valve.

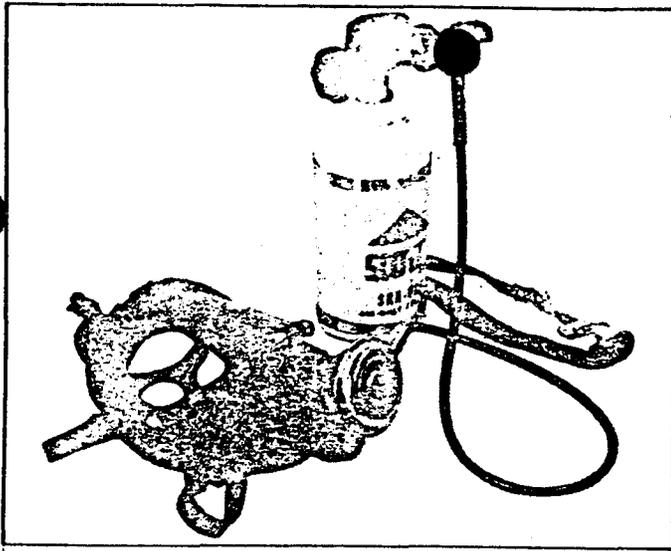


FIGURE 2 — 900055-04 Ska-Pak
With 5 Strap Head Harness

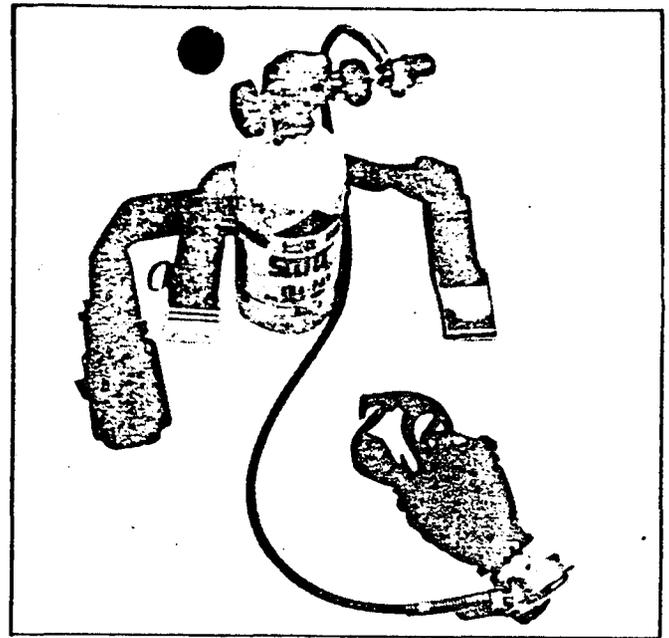


FIGURE 3 — 900055-02 Ska-Pak
With Duo-Seal Oral-Nasal Facepiece

3. No maintenance is required on either demand or pressure-demand regulators other than making sure the exhalation check valve is kept clear of loose dirt.
4. Clean and disinfect the mask assembly, with the regulator removed, as follows:
 - a. Wash facepiece in cleaner-disinfectant or detergent solution. Cleaner-disinfectant solutions are available that clean effectively and also contain an antibacterial agent. Alternatively, rubber parts may be washed in a liquid detergent solution, then immersed in either: 1) a hypochlorite solution (50 ppm of chlorine) for 2 minutes, 2) a 70% ethyl, methyl or isopropyl alcohol solution; or 3) a quaternary ammonium solution (200 ppm of quaternary ammonium compounds in water of less than 500 ppm total hardness). To prevent dermatitis and damage to parts, immersion times shall be adhered to, and disinfectants shall be thoroughly rinsed from disinfected parts.
 - Strong cleaning and disinfecting agents can damage parts. Vigorous mechanical agitation shall not be used, and the temperature recommended by the manufacturer shall be used. Solvents other than water should be used with caution.
 - b. Rinse completely in clean, warm water and air-dry in a clean area.
 - c. Wipe off dirt accumulations from the remainder of the respirator.

NOTE

Care should be exercised to avoid any undue scratching of the facepiece lens.

SECTION V

PACKING AND STORING

1. Make sure all equipment is completely dry before packing and storing.
2. Reassemble unit and arrange in storage rack or container in ready position.
3. Turn cylinder valve knob (1, figure 1) full clockwise.
4. Store the Ska-Pak in a cool, dry place.

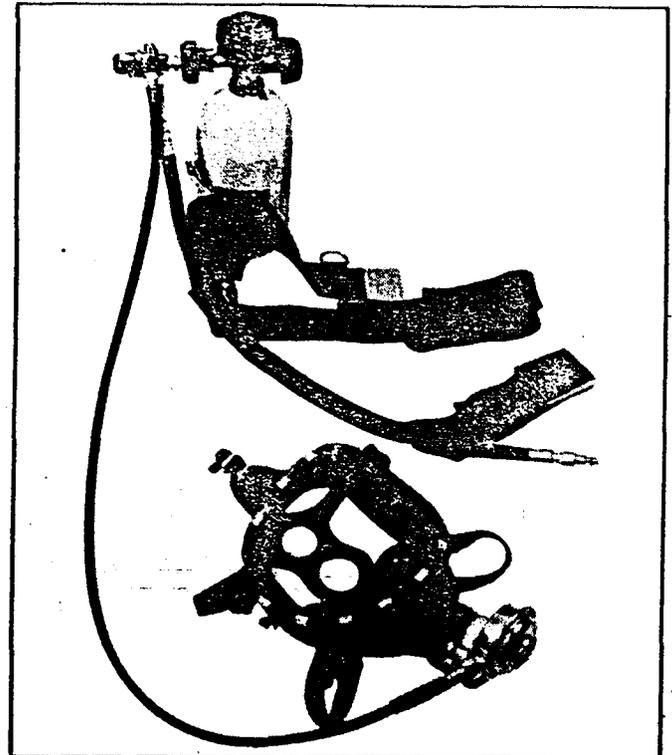


FIGURE 4 — 900055-13 Pressure-Demand
Ska-Pak With 5 Strap Head Harness

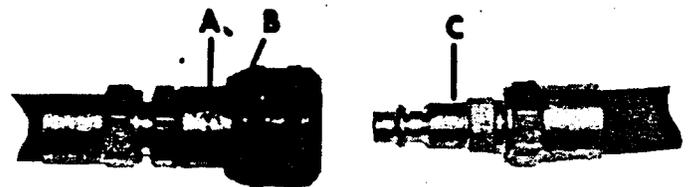


FIGURE 5 — Hansen Fitting

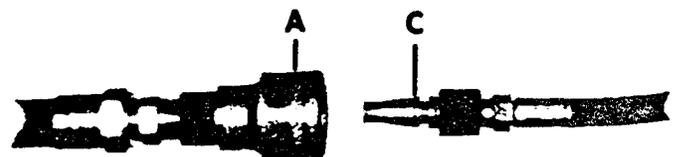


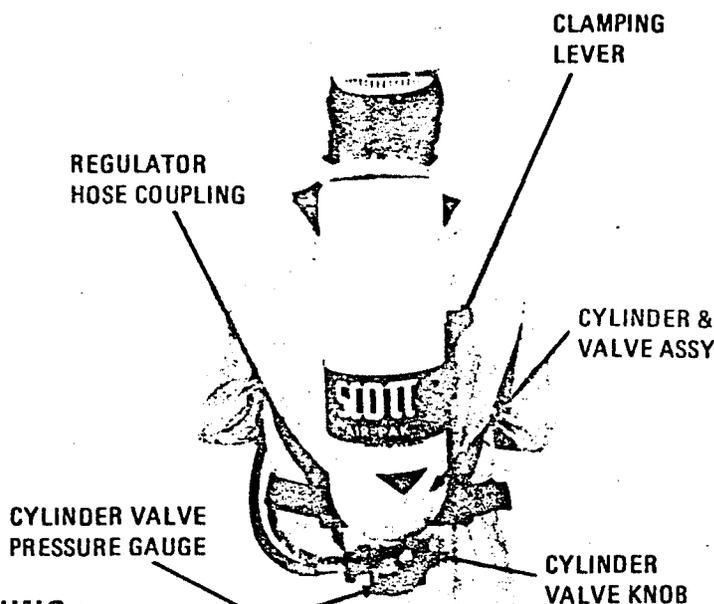
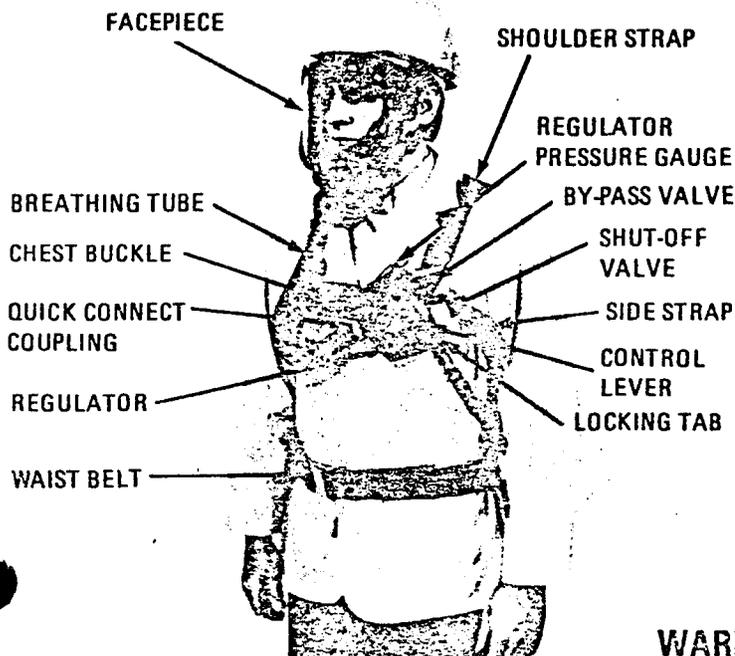
FIGURE 6 — Schrader Fitting



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SCOTT AIR-PAK® II_c PRESSURE-DEMAND

OPERATING AND MAINTENANCE INSTRUCTIONS



WARNING

IMPROPER USE OF THIS APPARATUS IN A HAZARDOUS ATMOSPHERE MAY RESULT IN INJURY OR DEATH. PERSONNEL SHOULD RECEIVE ADEQUATE TRAINING PRIOR TO USE.

The Scott Presur-Pak IIa, positive pressure, self-contained breathing apparatus (SCBA) is designed to provide maximum respiratory protection in objectionable or toxic atmospheres, regardless of concentration(*), or oxygen deficiency, with a NIOSH/MSHA rated duration of 30 minutes when properly DONNED, USED, AND MAINTAINED BY TRAINED PERSONNEL. The regulator is equipped with an audible Pak-Alarm® which will warn the user of diminishing air supply. The Pak-Alarm will activate when approximately 20-25% of the air supply remains. YOU MUST EGRESS IMMEDIATELY TO THE NEAREST SAFE, RESPIRABLE AREA WHEN THE PAK-ALARM RINGS. The apparatus is certified by NIOSH/MSHA for use in temperatures to -25°F with the installation of a Scott Nosecup Assembly, P/N 801432-00, in the facepiece. The nosecup assembly is required for use in temperatures at or below freezing or whenever lens fogging may occur.

*WARNING

IN ADDITION TO THIS APPARATUS, ADDITIONAL PROTECTIVE CLOTHING AND/OR SPECIAL EQUIPMENT SHALL BE PROVIDED, AS REQUIRED, FOR COMPLETE PROTECTION TO THE USER AND APPARATUS. (CERTAIN GASES POISON THROUGH THE UNBROKEN SKIN, SUCH AS HYDROGEN CYANIDE, OR ARE EXTREMELY IRRITATING TO THE SKIN, SUCH AS AMMONIA.) EVERY APPLICATION SHALL BE THOROUGHLY EVALUATED BY QUALIFIED PERSONNEL, PRIOR TO ENTRY OR USE OF THE APPARATUS.

SERVICE LIFE (Duration of air)

This apparatus is certified by NIOSH/MSHA to provide a "30 minute" duration of air, based on actual machine testing simulating men performing a variety of moderate-to-heavy work tasks.

The user should not expect to obtain exactly 30 minutes duration from this apparatus during each use. The work being performed may be more or less strenuous than the work-rates used in the NIOSH/MSHA tests. The duration may be shorter, possibly as short as 15 minutes, where the individual's work is more strenuous than the NIOSH/MSHA tests.

The duration of the apparatus will depend on such factors as:

1. the degree of physical activity of the user;
2. the physical condition of the user;
3. the degree of training or experience which the user has had with this or similar equipment;
4. the degree to which the user's breathing is affected by excitement, fear, or other emotional factors;
5. whether or not the cylinder is fully charged at the start of the work period;
6. the possible presence, in the compressed air, of carbon dioxide concentrations greater than .04% normally found in atmospheric air;
7. the condition of the apparatus;
8. the atmospheric pressure; Example: when used in a pressurized tunnel or caisson at 2 atmospheres (15 psi gauge) the rated duration will be one-half as long (15 minutes) as when used at 1 atmosphere; and at 3 atmospheres will be one-third as long (10 minutes).

REGULAR OPERATIONAL INSPECTION

The following procedure shall be used for incoming and daily inspection of the apparatus. An apparatus not routinely used, but kept for emergency use, shall be inspected at least monthly. All apparatus shall be inspected after each use.

1. Visually inspect the complete apparatus for worn or aging rubber parts and damaged components.
2. Check the latest cylinder hydrostatic test date to ensure it is current (within 5 years).
3. Visually inspect cylinder for large dents or gouges in metal. Cylinders which show exposure to high heat or flame, such as paint turned brown or black, decals charred or missing, gauge lens melted or elastomeric bumper distorted, shall be removed from service.
4. Check cylinder pressure gauge for "FULL" indication. If cylinder pressure is less than "FULL", replace with a fully charged cylinder.
5. Check to ensure regulator hose coupling is hand tightened to the cylinder valve outlet.

NOTE

Wrenches shall not be used, as damage to the coupling gasket may result.

6. Close regulator BY-PASS valve (red knob) by turning clockwise.
7. Close regulator MAIN-LINE valve (yellow knob) by depressing lock-tab and turning valve knob clockwise.
8. Check to ensure regulator cover is tight and not lifted. If cover is loose or lifted, remove regulator from service, tag and have repaired by authorized personnel.
9. Unthread breathing hose from regulator.
10. Verify diaphragm integrity as follows:
 - a. Place mouth over regulator outlet probe and gently inhale on regulator outlet. This negative pressure shall be maintained with no leakage (flow) through the regulator.
 - b. Gently blow into regulator outlet. This positive pressure shall be maintained with no leakage (flow) through the regulator.

WARNING

IF LEAKAGE IS PRESENT, RECHECK BY-PASS AND MAIN-LINE VALVES TO BE SURE THEY ARE FULLY CLOSED AND RETEST PER STEPS 10a AND 10b. IF LEAKAGE IS STILL PRESENT, REMOVE APPARATUS FROM SERVICE, TAG, AND HAVE REPAIRED BY AUTHORIZED PERSONNEL.

11. Open regulator MAIN-LINE valve (yellow knob), by turning full counterclockwise. A clicking sound shall be audible, indicating the lock-tab is functioning.
12. Open cylinder valve knob a minimum of 1-1/2 turns. The Pak-Alarm shall ring momentarily. The regulator gauge shall indicate "FULL". Check for leakage at cylinder valve, regulator and all connections.
13. Properly don facepiece and place palm over end of quick connect coupling. Inhale slightly. A negative pressure (suction) shall be created, pulling the facepiece toward the face. Hold for 5-10 seconds. If leakage is noted, remove facepiece from service and return for repair by authorized personnel.
14. Place breathing tube quick connect coupling close to palm of hand and exhale. If any air flows from breathing tube, remove facepiece from service and return for repair by authorized personnel.
15. Connect breathing tube coupling to regulator outlet securely. Inhale. Air should be delivered with very slight effort.
16. Place selector lever in "ON" position. A slight increase in

facepiece pressure shall be noted (positive pressure). Inhale several times. Place control lever in "OFF" position. Disconnect breathing tube and remove facepiece.

17. Push in and rotate the cylinder valve knob clockwise to close valve.
18. Release residual air pressure by slowly placing selector lever in "ON" position. Pak-Alarm shall ring momentarily. After pressure is released (no flow), place lever in "OFF" position.

WARNING

IF THE PAK-ALARM DOES NOT RING, REMOVE APPARATUS FROM SERVICE, TAG, AND RETURN FOR REPAIR BY AUTHORIZED PERSONNEL.

CAUTION

IF ANY DISCREPANCIES ARE FOUND USING THESE PROCEDURES, THE APPARATUS SHALL BE REMOVED FROM SERVICE, TAGGED, AND REPAIRED BY AUTHORIZED PERSONNEL.

MAKE SURE BY-PASS IS FULLY CLOSED AND MAIN-LINE IS FULLY OPENED.

DONNING AND NORMAL OPERATION

WARNING

ALL PERSONNEL USING THIS APPARATUS SHALL BE THOROUGHLY TRAINED BY QUALIFIED PERSONNEL IN DONNING, OPERATION AND EMERGENCY OPERATION.

1. Open carrying case and check cylinder gauge for "FULL" indication. Replace cylinder assembly if required.
2. Remove facepiece and breathing tube assembly; place next to case, exercising care not to scratch lens.
3. Check to ensure all strap assemblies, side and waist, are fully extended and waist belt buckle assembly is not connected.
4. Stand at cylinder end of carrying case (right end), lean forward, grasp both edges of the backplate just above waist belt area, and lift from case.
5. Swing the apparatus straight up and over the head, keeping elbows close to body. Rest apparatus on your back while still slightly bent over. The shoulder straps will slide along arms and fall into place on shoulders. (Make sure elbows are through shoulder and side strap loops). Connect the chest buckle; then while straightening up, pull down on the side straps to adjust harness to fit body (see figures 1 thru 3).



Figure 1



Figure 2

6. Connect and adjust waist belt assembly (see figure 4).
7. Place selector lever in "OFF" position.
8. Check to ensure BY-PASS valve is fully closed (full clockwise) and MAIN-LINE valve is fully open (full counterclockwise).



Figure 3



Figure 4

WARNING

OBSTRUCTION OF THE REGULATOR OUTLET WITH THE BY-PASS TURNED ON AND FLOWING MAY CAUSE REGULATOR OR DIAPHRAGM DAMAGE.

9. Open the cylinder valve knob a minimum of 1-1/2 turns. Pak-Alarm shall ring momentarily. Check regulator gauge for "FULL" indication, and don Scottoramic® facepiece as follows (see figures 5 thru 8).



Figure 5



Figure 6



Figure 7



Figure 8

WARNING

RESPIRATORS SHOULD NOT BE WORN WHEN CONDITIONS, SUCH AS A GROWTH OF BEARD, SIDE-BURNS, A SKULL CAP THAT PROJECTS UNDER THE FACEPIECE, OR TEMPLE PIECES ON GLASSES, PREVENT A GOOD FACE SEAL.

- a. Adjust all headstraps to a full outward position.
- b. Hold the head harness out of the way with one hand or back over the lens.
- c. Place the facepiece on the face with chin properly located in the chin pocket.
- d. Pull the head harness over the head and tighten neck straps and temple straps by pulling on the appropriate tabs.
- e. STROKE the head harness down toward the neck, using one or both hands.
- f. Retighten neck straps and then temple straps.
- g. In most cases, the top head strap will be tight in the full out position. Tighten only if necessary.
- h. Close off breathing tube quick connect coupling with your hand and slowly inhale. No leakage shall be noted and the facepiece shall be drawn toward the face.

NOTE

Refer to Scott Instruction Sheet, P/N 89027-00, supplied with each Scottoramic facepiece, for donning and maintenance procedures.

10. Connect breathing tube connection to the regulator outlet coupling. Tighten securely.
11. Place selector lever in the "ON" position. THERE SHALL BE NO AUDIBLE FLOW OF AIR FROM THE REGULATOR OR FLOW OF AIR THROUGH THE FACEPIECE. ANY FLOW INDICATES LEAKAGE--DO NOT PROCEED INTO CONTAMINATED AREA. CHECK FACEPIECE SEAL. IF LEAKAGE IS STILL PRESENT, REMOVE APPARATUS AND HAVE CHECKED AND REPAIRED BY AUTHORIZED PERSONNEL. THE "OFF" POSITION OF THE SELECTOR LEVER SHALL ONLY BE USED FOR DONNING AND DOFFING OF THE APPARATUS.
12. Check the regulator pressure gauge, during use, for remaining air supply to allow sufficient time for egress from the contaminated area.

WARNING

IMMEDIATELY EGRESS FROM THE CONTAMINATED AREA WHEN THE PAK-ALARM STARTS TO RING. IT WARNS THE USER WHEN APPROXIMATELY 20-25% OF THE AIR SUPPLY REMAINS IN THE CYLINDER. IN HIGH NOISE AREAS OR WHERE MORE THAN ONE APPARATUS IS BEING USED, TOUCH THE REGULATOR WITH YOUR HAND TO FEEL THE VIBRATION OF THE PAK-ALARM.

13. After egress and when in a SAFE, RESPIRABLE AREA, place selector lever in "OFF" position, uncouple the breathing tube quick connect coupling from the regulator outlet, remove facepiece, push in and rotate cylinder valve knob clockwise to close valve.
14. Bleed residual system pressure from the system by slowly placing selector lever in "ON" position. After pressure is released (no flow), place lever in "OFF" position.

EMERGENCY OPERATION

Should the regulator become damaged or inoperative during use, proceed as follows:

1. Open BY-PASS (red-knob) counterclockwise. Adjust the flow of air to sufficiently supply the breathing requirements of the user.

WARNING

EXCESSIVE BY-PASS FLOW WILL SUBSTANTIALLY REDUCE THE SERVICE LIFE (DURATION) OF THE APPARATUS.

2. Depress the lock-tab under the MAIN-LINE valve (yellow knob) and turn fully closed (clockwise).
3. IMMEDIATELY egress from the area to a SAFE, RESPIRABLE AREA.

WARNING

DO NOT OBSTRUCT THE OUTLET OF THE REGULATOR WHILE IN THE BY-PASS MODE. THE BY-PASS MODE SHALL BE USED FOR EMERGENCY OPERATION ONLY. DO NOT USE FOR OTHER PURPOSES.

4. Tag and remove apparatus for repair by authorized personnel.

CYLINDER REPLACEMENT PROCEDURE

1. Place regulator selector lever in the "OFF" position, disconnect facepiece from regulator.
2. Push in and rotate the cylinder valve knob fully clockwise to close the valve.
3. Bleed residual system pressure by slowly placing selector lever in "ON" position. After pressure is released (no flow), place lever in "OFF" position.
4. Rotate regulator hose coupling counterclockwise, removing it from the cylinder valve outlet.

CAUTION

ATTEMPTING TO UNCOUPLE REGULATOR HOSE COUPLING WHILE PRESSURIZED MAY RESULT IN DAMAGE TO, OR LOSS OF, COUPLING GASKET.

5. Pull the cylinder clamping lever down while holding cylinder to release the cylinder and valve assembly from the backplate.
6. Lift the cylinder and valve assembly out of the backplate and replace with a fully charged cylinder and valve assembly. Start at the top of the backplate and lower cylinder assembly until properly positioned.
7. Raise and push up cylinder clamping lever to secure the cylinder and valve assembly in the backplate.
8. Reconnect regulator hand disconnect to the cylinder valve.

NOTE

Wrenches shall not be used, as damage to coupling gasket may result.

9. Open cylinder valve knob a minimum of 1-1/2 turns by rotating counterclockwise. No constant leakage shall be noted. If leakage occurs, and cannot be stopped, the unit shall be removed from service, tagged, and repaired by authorized personnel.
10. The unit is now ready for use and may be returned to service.

STAND-BY CLEANING AND STORAGE

NOTE: The following procedure, in addition to the REGULAR OPERATIONAL INSPECTION, shall be used after each use and for preparing the apparatus for storage/stand-by.

1. Inspect the apparatus for worn or aging rubber parts or damaged components.
2. If in good condition, carefully wash facepiece assembly with warm soap and water or mild detergent solution. A soft brush may be used to scrub the rubber components, **DO NOT** use on the lens.
3. Rinse the facepiece assembly including the exhalation valve thoroughly. Flush water through the breathing tube, letting it flow out through opening onto lens.
4. Disinfect the facepiece by submersion, using one of the following solutions:

WARNING

DO NOT MIX THE SOLUTIONS. ONLY USE ONE.

- a. 70% solution of ethyl, methyl or isopropyl alcohol
- OR**
- b. Hypochlorite solution, two tablespoons chlorine bleach per gallon of water
- OR**
- c. Aqueous solution of iodine, one teaspoon of tincture of iodine per gallon of water

NOTE

Maximum cleaner and disinfectant temperature should not exceed 120°F.

5. Rinse facepiece thoroughly and allow to completely air-dry.
6. Damp sponge dirt accumulation from the rest of the apparatus.
7. Follow REGULAR OPERATIONAL INSPECTION PROCEDURE.
8. Replace the apparatus in the carrying case, making sure all components are thoroughly dry, the cylinder is fully charged, the cylinder valve is fully closed, the BY-PASS valve is fully closed, the MAIN-LINE valve is fully open and the control lever is in the "OFF" position.

NOTE

If repair information is required, contact an Authorized Scott Distributor or Service Center.

POST IN A CONSPICUOUS LOCATION, IN ACCORDANCE WITH OSHA REG. 1926.50

EMERGENCY PHONE NUMBERS

ARCO OIL & GAS CO. ROCKY FORD NO.1

PHYSICIAN (801) 676-8842 or (801) 676 8811

HOSPITAL (801) 676-8811 or

AMBULANCE PIUTE CO. (801) 662-5151 or GARFIELD CO. 801 676 2411

FIRE DEPARTMENT (801) 577 2839 or (801) 577 2951

POLICE (801) 577 2531 or SHERIFF PIUTE CO. 1-800-896-6471

ESSE
INTERNATIONAL, INC.

H₂S

ENVIRONMENTAL SAFETY SERVICE & EQUIPMENT

HOUSTON, TX. 713/496-4500	DENVER, COLO. 303/752-1471
EVANSTON, WYO. 307/789-4885	TYLER, TX. 214/566-4079
DICKINSON, N.D. 701/227-0315	CARRIZO SPGS., TX. 512/876-5011
WILLISTON, N.D. 701/572-8611	LAUREL, MS. 601/649-3451

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		3. LEASE DESIGNATION AND SERIAL NO. U-26805	
2. NAME OF OPERATOR ARCO Oil and Gas Company, Division of Atlantic Richfield Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME ---	
3. ADDRESS OF OPERATOR P.O. Box 5540, Denver, Colorado 80217		7. UNIT AGREEMENT NAME ---	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 2030' FSL & 1645' FWL		8. FARM OR LEASE NAME Rocky Ford	
14. PERMIT NO.		9. WELL NO. 1	
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 7236' GL		10. FIELD AND POOL, OR WILDCAT Wildcat	
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 27-30S-3W	
		12. COUNTY OR PARISH Piute	13. STATE Utah

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>
(Other) <input type="checkbox"/>	

SUBSEQUENT REPORT OF:

WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
(Other) <u>H₂S Plan</u>	

(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.)*

Attached please find an H₂S Contingency Plan for inclusion with the APD submitted April 30, 1984.

RECEIVED

MAY 17 1984

DIVISION OF OIL
GAS & MINING

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

SIGNED W.A. Walther, Jr. TITLE Operations Manager DATE 5-15-84
W.A. Walther, Jr.

(This space for Federal or State office use)

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

*See Instructions on Reverse Side



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
RICHFIELD DISTRICT OFFICE
150 EAST 900 NORTH
RICHFIELD, UTAH 84701

file

RECEIVED

MAY 21 1984

DIVISION OF OIL
GAS & MINING

IN REPLY
REFER TO:
3100
(U-050)

May 18, 1984

Utah State Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

Re: ARCO Oil and Gas Well
Lease No. U-26805
Rocky Ford 1
Section 27, T.30S., R.3W. SLB&M
Piute County, Utah

Gentlemen:

Enclosed is your copy of the approved APD with attached conditions of approval for both the Surface and Subsurface use plans.

Sincerely yours,

Ronald L. Pendleton

Donald L. Pendleton
District Manager

Enclosure:
APD
Conditions of Approval
Conditions of Approval Surface Use Plan

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>			5. LEASE DESIGNATION AND SERIAL NO. U-26805	
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>			6. IF INDIAN, ALLOTTEE OR TRIBE NAME ----	
2. NAME OF OPERATOR ARCO Oil and Gas Company, a Division of Atlantic Richfield Company			7. UNIT AGREEMENT NAME ----	
3. ADDRESS OF OPERATOR P. O. Box 5540, Denver, Colorado 80217			8. FARM OR LEASE NAME Rocky Ford	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*) At surface 2030'FSL & 1645'FWL, Sec. 27-T30S-R3W At proposed prod. zone			9. WELL NO. 1	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* Approx 2-1/2 miles south of Kingston, Utah			10. FIELD AND POOL, OR WILDCAT Wildcat	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 1645' lease		16. NO. OF ACRES IN LEASE 2560	17. NO. OF ACRES ASSIGNED TO THIS WELL NOT ASSIGNED	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. NONE		19. PROPOSED DEPTH 11,700'	20. ROTARY OR CABLE TOOLS Rotary	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 7236' GR			22. APPROX. DATE WORK WILL START* July 15, 1984	

RECEIVED

MAY 21 1984

DIVISION OF OIL
GAS & MINING

Pursuant to NTL-6, attachments are as follows:
Certified Location Plat
Drilling Plan with attachments
Surface Use Plan with attachments

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

24. SIGNED J. McCarthy, Jr. TITLE Operations Manager DATE 30 April 1984
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____
APPROVED BY Donald G. Rowlett, Jr. TITLE DISTRICT MANAGER DATE 5/15/84
CONDITIONS OF APPROVAL, IF ANY:

NOTICE OF APPROVAL

FLARING OR VENTING OF
GAS IS SUBJECT TO NTL 4-A
DATED 1/1/80

3455

D/C

20

21

22

23

133
D/C

5815
D/C

4090

U26804
OGLse

U26805
OGLse

7475
D/C

97

3501
D/C

U42540
OGLse

29

28

27

26

ASCO
D/C

53
C

SS 11

U26806
OGLse

U26807
OGLse

32

33

34

35

43-65-0008
D/C

U26808
OGLse

U26809
OGLse

U26810
OGLse

CONDITIONS OF APPROVAL

1. DRILLING REPORTS: A weekly progress will be sent to the Richfield District Office. All reports submitted will be kept confidential.
2. WELL SIGN: All drill wells must have a well sign in legible condition from spud date to final abandonment. The following information is required on the sign:

Lessee name or name of operator, lease serial No. (or communitization or unit agreement identification) and name of lessor if on Indian land, and number and surveyed description of the well.
3. PLUGGING, SUSPENSION, OR PLAN CHANGE: Do not plug, plug back, suspend operations or change approved plan without prior BLM approval. Phone if urgent (see phone numbers above), followed immediately by written request on Form 3160-5.
4. REQUIRED DATA: Within 30 days after completion, submit two copies of Well Log (Form 3160-5), drill stem test data, core description and analysis, electric logs, directional survey, or any other data compiled during drilling of the well.
5. BLOWOUT PREVENTER: Blowout preventer and control valves must be installed prior to drilling below surface casing. The equipment should be pressure tested before drill-out and should be tested for mechanical proficiency at least once daily, and the information included in the daily drilling report.
6. SURFACE LOCATION APPROVAL: You are required to contact the Sevier River Resource Area Manager, prior to commencing construction or major reconstruction of any road to the location site. You may not appropriate sand, stone, gravel, caliche, or related minerals that are in Federal or Indian ownership for lease use without authorization from the Area Manager.
7. IMMEDIATE REPORT: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported in accordance with the requirements of NTL-3A or its revision.
8. EVALUATION OF SHOWS: All showings of oil and gas must be evaluated and, if commercial, must be depleted before abandonment. Any show not completed must be isolated behind pipe in any producing well, or isolated with cement plugs in abandoning the hole. All other minerals penetrated should be reported to BLM and must be isolated in the same manner as oil and gas shows.
9. DRILLING DEADLINE: This approval is good for 75 days. Operations shall not be commenced after July 31, 1984, unless prior approval by the (authorized officer) BLM is obtained.

10. DRILLING PITS: If the well is suspended or abandoned, all pits will be fenced until they have been backfilled.
11. NOTIFICATION OF AUTHORIZED OFFICER: Notify the (authorized officer) BLM sufficiently in advance so he may approve and witness plugging, plugging back, formation tests, water shutoff tests, and running and cementing casing, other than conductor string. Phone if urgent, followed immediately with written request on Form 3160-5.
12. REMOVAL OF EQUIPMENT: Do not remove drilling equipment from any abandoned or suspended well without consent of the (authorized officer) BLM.
13. MULTIPLE ZONE OR ALTERNATE ZONE COMPLETIONS: All multiple or alternate zone completions must be approved in advance. Applications for these approvals must be accompanied by:
 - (a) Electric log of well with separate zones clearly marked; and
 - (b) Diagrammatic sketch of mechanical installation proposed.
14. SPACING AND UNORTHODOX UNIT: Approval of this well is not to be construed as approval of the unorthodox spacing unit as shown on your plat. If the well becomes productive, a communitization agreement will be necessary, if more than a single Federal or Indian lease is within the lands committed to the well.
15. PRODUCTION FACILITIES: If the well becomes a producer, approval of this office will be required before installing on or off leasehold flow lines, tank batteries, measurement, or disposal facilities.
16. ARCHEOLOGICAL OR HISTORICAL SITES: If any important archeological or historical sites are uncovered during this operation, shut down all operations immediately, and notify this office at once.
17. BLOWOUT PREVENTER GUIDELINES:
 - (a) After setting the surface casing string, and before drilling into the Dakota formation, the blowout preventers and related control equipment must be pressure tested to 70% of the rated internal yield. Any equipment failing to test satisfactorily must be repaired or replaced. This office should be notified in sufficient time for a representative to witness the tests and shall be furnished a copy of the pressure test report.
 - (b) Pipe rams and the annulus-type preventer must be actuated at least once each 24 hours and the blind rams each time the drill pipe is out of the hole.
 - (c) The accumulator system must maintain a pressure capacity reserve at all times to provide for repeated operation of hydraulic preventers.

- (d) A drill string safety valve(s) in the open position must be maintained on the rig floor at all times while drilling operations are conducted. Separate valves are required when drilling with a mixed string.
 - (e) Blowout prevention drills must be conducted as necessary to ensure that each drilling crew is properly trained to carry out emergency duties.
18. MUD RESERVE: Pits should contain a sufficient quantity of reserve fluids to ensure well control.
19. DRILLING OPERATING PRACTICES:
- (a) Always condition hole before making trip.
 - (b) Watch fluid level in pits and in drill pipe-casing annulus; any change should be evaluated before continuing trip.
 - (c) Drilling fluid should be tested for viscosity, water loss, wall cake thickness, weight, and gel strength every 8 hours.
 - (d) Pressure test casing strings prior to drilling plugs each time a string is run and cemented. Test pressure must equal or exceed 0.2 psi/ft of depth or 1,000 psi, whichever is greater. A leak is indicated if pressure drop exceeds 10 percent in 30 minutes; if there is any indication of leak, corrective measures must be taken.

A successful pressure test must be obtained before proceeding to the next step in the drilling program.
 - (e) Install H₂S detector and alarm.
 - (f) Install mud degasser.
 - (g) Test lines, separators, and tanks should be installed and operative before testing any potential hydrocarbon zones when fluid is expected to reach the surface.
20. SPUD DATE: The spud date must be reported to the (authorized officer) BLM within 48 hours, and Form 3160-6, Monthly Report of Operations, will be filed starting with the month in which operations began.
21. SUBSEQUENT REPORT OF ABANDONMENT: If the drilling operations result in a dry hole, Form 3160-5 is to be filed within 15 days after the well is abandoned downhole. A subsequent letter is to be filed at the time that all surface restoration work, including revegetation, has been completed and the location is considered ready for inspection.
22. CASING REPORTS: Reports are to be furnished for each string of casing runs and should show the dates of work; size hole drilled; size, grade, and weight of casing run; depth set; amount and kind of cement used; cement additions; cement tops behind casing and determination of them; date for each stage, if a multistage job; and method of pressure testing casing, and test results.

23. USED CASING: Notify the (authorized officer) BLM in sufficient time for a representative to inspect any used casing planned for use in a casing string.
24. RIG EQUIPMENT: Rig engines must have water-cooled exhausts. All rig heating stoves must be of the explosion-proof type.
25. OTHERS: All shows of fresh water and minerals will be reported and protected. A sample will be taken of any flows and furnished this office for analysis. All oil and gas shows will be adequately tested for commercial possibilities, reported and protected.
26. If a replacement rig is contemplated for completion operations, a "Sundry Notice" (Form 3160-5) to that effect must be filed, for prior approval of the District Supervisor, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.
27. The operator will have a copy of the approved APD and all conditions of approval on location.

Your contact with this office is Patrick C. Strong, office phone 542-3461, home phone 542-3292, Hanksville, Utah or Roderick Lister, office phone 896-8228 Richfield, Utah.

Your contacts with the BLM State are as follows:

Address: University Club Building, 136 East South Temple, Salt Lake City, Utah 84111

Office Phone: (801) 524-3029

District Supervisor, E.W. Gynn

District Drilling Engineer, W.P. Martens

District Production Engineer, R.A. Henricks

Staff Engineer, A.M. Raffoul

Home Phone: (801) 582-7042

Home Phone: (801) 466-2780

Home Phone: (801) 484-2294

Home Phone: (801) 484-2638

CONDITIONS OF APPROVAL SURFACE USE PLAN

1. The reserve pit will be constructed with a clay base and a gravel cap over the clay base before the liner is installed. Leak testers will be installed into the gravel cap on the down slope side of the reserve pit.
2. Only burnable items will be allowed in the burn pit. All burnable items will be separated and removed from the location and disposed at an authorized dump site. A burn pit is allowed only if ARCO has acquired a permit to burn from the State of Utah; otherwise, only a portable trash cage will be used. If a permit is acquired, ARCO will submit a copy of the permit to the Sevier River Resource Area Manager.
3. Vehicular traffic will not exceed 10 mph on the constructed access route. This speed limit will be posted along the access route.
4. No passing of vehicles will be allowed on those portions of the road without turnouts.
5. Vehicles frequently using the access road (i.e. water trucks, etc.) will be regulated so as to prevent unnecessary congestion.
6. Upon completion, the reserve pit will be fenced on all four sides with wire mesh at a height of no less than eight feet.
7. The following seed mixture will be sown on all disturbed areas to be rehabilitated.
 - a. 5 lbs/ acre Indian ricegrass
 - b. 3 lbs/ acre Fourwing saltbrush
 - c. 1 lbs/ acre Globemallow
 - d. 2½ lbs/ acre Needle and thread
 - e. 1½ lbs/ acre Bluebunch wheatgrass
 - f. 1½ lbs/ acre Squirrel tail
 - g. 2 lbs/ acre Big sagebrush
 - h. 3 lbs/ acre White sagebrush
8. The appropriate operator will receive and have on hand at the location a copy of the Conditions of Approval for the Surface Use Plan.
9. Details pertaining to the installation of erosion control devices to be placed along the access road and drill pad will be supplied by the authorized officer, BLM prior to the start of such operations.

APPLICATION NO. 84-61-14
DISTRIBUTION SYSTEM

Application For Temporary Change of Point of Diversion, Place or Purpose of Use STATE OF UTAH

(To Be Filed in Duplicate)

Richfield Utah June 24 1984
Place Date

For the purpose of obtaining permission to temporarily change the point of diversion, place or purpose of use
(Strike out written matter not needed)

of water, the right to the use of which was acquired by _____
(Give No. of application, title and date of Decree and Award No.)
to that hereinafter described, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of the Laws of Utah.

- The owner of right or application is Kingston Irr. Co. Award Page 30-31 Cox Decree
- The name of the person making this application is ARCO Oil and Gas Co. Division of Atlantic Richfield Co
- The post office address of the applicant is P.O. Box 5540 Denver, Colorado 80217
ATTN. W.A. Walther, Jr.

PAST USE OF WATER

- The flow of water which has been used in second feet is 21.08
- The quantity of water which has been used in acre feet is _____
- The water has been used each year from 3 - 15 to 9 - 30 incl.
(Month) (Day) (Month) (Day)
- The water has been stored each year from None to _____ incl.
East Fork (Month) (Day) (Month) (Day)
- The direct source of supply is Sevier River in Piute County.
- The water has been diverted into three unnamed ditch canal at a point located 879 ft South
& 937 ft West of the NE Cor. Sec. 14, T30S, R3W, SLB&M.
- The water involved has been used for the following purpose: Irrigation as described in Sevier River proposed determination

Total 1091.7 acres.

NOTE: If for irrigation, give legal subdivisions of land and total acreage which has been irrigated. If for other purposes, give place and purpose of use.

THE FOLLOWING TEMPORARY CHANGES ARE PROPOSED

- The flow of water to be changed in cubic feet per second is 0.02
- The quantity of water to be changed in acre-feet is 15 acre feet per year
- The water will be diverted into the by pumping ditch canal at a point located 879 ft South
& 937 ft West of the NE Cor. Sec. 14, T30S, R3W, SLB&M.
- The change will be made from July 1 1984 to July 1 1985
(Period must not exceed one year)
- The reasons for the change are _____
- The water involved herein has heretofore been temporarily changed 0 years prior to this application.

(List years change has been made)

- The water involved is to be used for the following purpose: Drilling of an exploratory oil and gas well, Rocky Ford prospect located Section 27, T30S, R3W, Piute Co., Utah
Total _____ acres.

NOTE: If for irrigation, give legal subdivisions of land to be irrigated. If for other purposes, give place and purpose of proposed use.

EXPLANATORY

Water will be pumped and hauled by truck from the river to the drilling site,
Approximately (5) five miles from the river.

7.50

A filing fee in the sum of \$5.00 is submitted herewith. I agree to pay an additional fee for either investigating or advertising this change, or both, upon the request of the State Engineer.

Norman E. Hunterman, Consultant
Signature of Applicant

RULES AND REGULATIONS

(Read Carefully)

This application blank is to be used only for temporary change of point of diversion, place or nature of use for a definitely fixed period not to exceed one year. If a permanent change is desired, request proper application blanks from the State Engineer.

Application for temporary change must be filed in duplicate, accompanied by a filing fee of \$7.50. Where the water affected is under supervision of a Water Commissioner, appointed by the State Engineer, time will be saved if the Application is filed with the Commissioner, who will promptly investigate the proposed change and forward both copies with filing fee and his report to the State Engineer. Applications filed directly with the State Engineer will be mailed to the Water Commissioner for investigation and report. If there be no Water Commissioner on the source, the Application must be filed with the State Engineer.

When the State Engineer finds that the change will not impair the rights of others he will authorize the change to be made. If he shall find, either by his own investigation or otherwise, that the change sought might impair existing rights he shall give notice to persons whose rights might be affected and shall give them opportunity to be heard before acting upon the Application. Such notice shall be given five days before the hearing either by regular mail or by one publication in a newspaper. Before making an investigation or giving notice the State Engineer will require the applicant to deposit a sum of money sufficient to pay the expenses thereof.

Address all communications to:

State Engineer
State Capitol Building
Salt Lake City, Utah

STATE ENGINEER'S ENDORSEMENTS

(Not to be filled in by applicant)

Change Application No. _____ (River System)

1. _____ Application received by Water Commissioner _____ (Name of Commissioner)

Recommendation of Commissioner _____

2. _____ Application received ^{over counter} by mail in State Engineer's Office by _____

3. 6-25-84 Fee for filing application, \$7.50 received by AN; Rec. No. _____

4. _____ Application returned, with letter, to _____, for correction.

5. _____ Corrected application resubmitted ^{over counter} by mail to State Engineer's Office.

6. _____ Fee for investigation requested \$ _____

7. _____ Fee for investigation \$ _____, received by _____; Rec. No. _____

8. _____ Investigation made by _____; Recommendations: _____

9. _____ Fee for giving notice requested \$ _____

10. _____ Fee for giving notice \$ _____, received by _____; Rec. No. _____

11. _____ Application approved for advertising by ^{publication} mail by _____

12. _____ Notice published in _____

13. _____ Notice of pending change application mailed to interested parties by _____ as follows:

14. _____ Change application protested by _____ (Date Received and Name)

15. _____ Hearing set for _____ at _____

16. 6-26-84 Application recommended for ~~rejection~~ approval by MSA

17. 6-26-84 Change Application ~~rejected~~ approved and returned to applicant

THIS APPLICATION IS APPROVED SUBJECT TO THE FOLLOWING CONDITIONS:

- 1. _____
- 2. _____
- 3. _____

M. Stanley Adams, Area Engineer
for *Dee C. Hansen* State Engineer

NOTICE OF SPUD

Company: ARCO Oil & Gas Co
Caller: John Branch (BLM. - RDO)
Phone: _____

Well Number: 1 Rocky Ford
Location: NE SW 27-30S-3W
County: Piute State: Utah
Lease Number: U-26805

Lease Expiration Date: _____

Unit Name (If Applicable): _____

Date & Time Spudded: 7-14-84 12 NOON

Dry Hole Spudder/Rotary: Rotary

Details of Spud (Hole, Casing, Cement, etc.) _____

Rotary Rig Name & Number: _____

Approximate Date Rotary Moves In: _____

FOLLOW WITH SUNDRY NOTICE

Call Received By: WPM

Date: 7-16-84

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE
(Other instructions on reverse side)

Budget Bureau No. 1004-0135
Expires August 31, 1985

LEASE DESIGNATION AND SERIAL NO.

U-26805

3. IF INDIAN, ALLOTTEE OR TRIBE NAME

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.)

CONFIDENTIAL

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		7. UNIT AGREEMENT NAME
2. NAME OF OPERATOR ARCO Oil and Gas Company, Division of Atlantic Richfield Company		8. FARM OR LEASE NAME Rocky Ford
3. ADDRESS OF OPERATOR P.O. Box 5540, Denver, Colorado 80217		9. WELL NO. 1
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 2030' FSL & 1645' FWL		10. FIELD AND POOL, OR WILDCAT Wildcat
14. PERMIT NO. 43-031-30012	15. ELEVATIONS (Show whether DF, RT, GR, etc.) 7236' GL	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 27-30S-3W
		12. COUNTY OR PARISH Piute
		13. STATE Utah

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL 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>WATER SOURCE</u> <input checked="" type="checkbox"/>	
(Other):			

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

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

Attached please find an approved copy of the Water Permit for this well.

RECEIVED
JUL 16 1984
DIVISION OF OIL
GAS & MINING

18. I hereby certify that the foregoing is true and correct
SIGNED W.A. Walther TITLE Operations Manager DATE 7-12-84
(This space for Federal or State office use)

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

*See Instructions on Reverse Side

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. <input type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER		5. LEASE DESIGNATION AND SERIAL NO. FEE
2. NAME OF OPERATOR ARCO Oil and CONFIDENTIAL Division of Atlantic Richfield Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME NA
3. ADDRESS OF OPERATOR P.O. Box 5540, Denver, Colorado 80217		7. UNIT AGREEMENT NAME Iron Springs Unit
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 1005' FSL & 350' FWL		8. FARM OR LEASE NAME ARCO Three Peaks
14. PERMIT NO. 43-021-30006	15. ELEVATIONS (Show whether OF, RT, GR, etc.) 5391' GL	9. WELL NO. 1
		10. FIELD AND POOL, OR WILDCAT CONFIDENTIAL cat
		11. SEC., T., R., 1/4, OR BLK. AND SURVEY OR AREA 17-35S-12W
		12. COUNTY OR PARISH Iron
		13. STATE Utah

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <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>N.O. SETTING CASING</u>	
(Other)		(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

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

Drilled ahead to 2424'. Ran 60 jts (2425.2') 13-1/2", 81.4#, S-95, BTC casing and landed @ 2422'. Pumped 30 bbls water and 1805 sx lite with 1/4#/sx celloflake followed by 600 sx Class "B". Displaced cement with 41 bbls mud. Ran 10 jts 1" to 200'. Cemented through 1" with 350 sx Class "B" cement with good circulation. Cement returns to surface. Tested BOP to 250 psi and 3000 psi for 5 mins - OK. Drilled cement and drilling ahead 7-7-84.

RECEIVED

JUL 26 1984

DIVISION OF OIL
GAS & MINING

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

SIGNED WA Walther, Jr. / kj TITLE Operations Manager DATE 7-23-84
W. A. Walther, Jr.

(This space for Federal or State office use)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE
(Other instructions on
reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

2. LEASE DESIGNATION AND SERIAL NO.

U-26805

3. IF INDIAN, ALLOTTEE OR TRIBE NAME

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.)

OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR

ARCO Oil and Gas Company, Division of Atlantic Richfield Company

3. ADDRESS OF OPERATOR

P.O. Box 5540, Denver, Colorado 80217

4. LOCATION OF WELL. Report location clearly and in accordance with any State requirements.*

(See also space 17 below.)
At surface

2030' FSL & 1645' FWL

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Rocky Ford

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

27-30S-3W

14. PERMIT NO.

43-031-0012

15. ELEVATIONS (Show whether OF, RT, GR, etc.)

7236' GL

12. COUNTY OR STATE

Piute

16.

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETION

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

SPUD

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

(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.)*

MI & RU Chase Rig #3. SPUD 17-1/2" hole @ 1200 hrs 7-14-84.
Ran 3 jts (128') 24", 94#, 3/8" wall welded casing and landed @ 102' KB. Cemented with 360 sx Class "A" cement with 3% CaCl₂ and 1/4#/sx flocele. Good returns, 17 bbls cement circulated to pit. Drilling ahead 7-18-84.

RECEIVED

JUL 26 1984

DIVISION OF OIL
GAS & MINING

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

SIGNED

W.A. Walther, Jr.
W.A. Walther, Jr.

TITLE

Operations Manager

DATE

7-23-84

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

strict	County or Parish	State
	Piute	Utah
eid	Lease or Unit	Well no.
Utah High Plateau (Wildcat)	Rocky Ford	#1
8/1/84 1690	Day-18 (195' rmg) - Rmg 14-3/4" hole to 22" @ 1038'. (24" @ 102') MW: 8.7# Vis: 38 Pv/Yp: 10/9 Opng hole prior to rmg 16" csg. Lost approx 1400 BM in last 24 hrs.	
8/2/84 1690	Day-19 (282' rmg) - Rmg 14-3/4" hole to 22" @ 1320'. (24" @ 102') MW: 8.7# Vis: 38 Pv/Yp: 10/9 Opng hole prior to rmg 16" csg. Lost approx 1400 BM in last 24 hrs again.	
8/3/84 1690	Day-20 (360' rmg) - Rmg 14-3/4" hole to 22" @ 1680'. (24" @ 102') MW: 8.8# Vis: 37 Pv/Yp: 11/9 Opng hole prior to rmg 16" csg. Lost approx 1000 BM in last 24 hrs.	
8/4-6 1690	Day-23 (0' rmg) - Drlg cmt in 16" csg. (16" @ 1669') Drlg w/wtr Opn 14-3/4" hole to 22' to 1690'. Circ sweep & cond hole. Make 12 std sht trip. Circ & cond hole. TOH. RU csg crew. Ran 43 jts 16", 75#, K-55, STC csg. Landed csg @ 1669' KB. Circ csg. PU stab-in stinger on 4-1/2" DP & TIH f/inner string cmt job. RU Hallib & cmtd csg w/1410 sx Howco Lite w/add, foll'd by 1075 sx Cl "A" cmt w/add. Lost cmt returns w/100 sx tail cmt left to pmp. Completed job. CIP @ 0230 hrs 8/4/84. TOH w/ 4-1/2" DP. WOC. TOC @ 330'. Run 320" of 1" pipe dn 16" x 22" ann. Cmt backside w/200 sx Cl "A" cmt w/add. POH w/1", WOC. Run 100' of 1" pipe dn ann. Cmt ann to surf w/100 sx Cl "A" cmt w/add. WOC. Cut csg. ND diverter. Weld on csghd. NU & press tst BOPE. TIH. Drl'd FC & 60' cmt. Press tst csg to 1000 psi. Cont drlg cmt in csg. Survey: 1/8° @ 1690'.	
8/7/84 1906	Day-24 (216') - Drlg. (16" @ 1669') MW: 8.5# Vis: 38 Pv/Yp: 9/10 Drl'd cmt & GS. Drl'd 14-3/4" hole to PD w/ 11-1/2 hrs mixing mud because of lost returns. Lost 1550 BM.	
8/8/84 2445	Day-25 (339') - Drlg. (16" @ 1669') MW: 8.5# Vis: 47 Pv/Yp: 9/10 Drl'd & surveyed 14-3/4" hole to PD. Lost 1500 BM due to lost returns. Survey: 3/4° @ 2008' & 2164'. (AC \$819M) (AFE \$3784M)	
8/9/84 2550	Day-26 (305') - Drlg. (16" @ 1669') MW: 8.5# Vis: 37 Pv/Yp: 9/9 Drl'd & surveyed 14-3/4" hole to PD. Lost 1300 BM. Survey: 3/4° @ 2350' & 2504'.	
8/10/84 2820	Day-27 (270') - Drlg. (16" @ 1669') MW: 8.6# Vis: 35 Pv/Yp: 10/7 Drl'd 14-3/4" hole to PD. Lost 1200 BM. Survey: 1/2° @ 2657'.	
8/11-13 3390	Day-30 (570') - Drlg. (16" @ 1669') MW: 8.6# Vis: 40 Pv/Yp: 9/10 Drl'd 14-3/4" hole to PD. Lost 3520 BM in 3 days. Surveys: 1/8° @ 2874', 2° @ 6199', 1/4° @ 3264'.	

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Utah High Plateau (Wildcat)

Lease or Unit

Rocky Ford

Well no.

#1

8/14/84 3582

Day-31 (192') - Pmpg LCM pill.

(16" @ 1669')

MW: 8.6# Vis: 38 Pv/Yp: 8/9

Drl'd 14-3/4" hole to 3457', lost circ. Mix LCM pill, regained full returns (lost 500 BM total). Drl'd to PD, lost returns. Mix 200 bbl LCM, no returns. In past 24 hrs, lost 1100 BM. Survey: 1/4° @ 3479'.

8/15/84 3582

Day-32 (0') - WOC.

(16" @ 1669')

MW: 8.5# Vis: 37 Pv/Yp: 8/10

Lost circ @ 3582'. Mix 3 LCM pills w/no success. 750 BM lost @ 3582'. POH. RIH OE to 3526'. Set 200 sx plug Thixotropic cmt. POH. RIH to 1600'w/bit. WOC. 2400-0600 hrs pmp 200 BM w/no returns.

8/16/84 3648

Day-33 (66') - POH.

(16" @ 1669')

Aerated Mud

With bit @ 1690' pmp 200 BM w/30% LCM - no returns. RIH, tag cmt 3436'. Mix mud & LCM, got returns. Drl'd to 3595' w/o returns, lost 400 BM. Mix mud & LCM. POH, PU jet sub: RIH. Drl'd 14-3/4" hole w/aerated mud to PD. POH to set cmt plug.

8/17 Day 34

TD: 3715' (67') - Drlg.

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(16" @ 1669')

Aerated Mud

POH. Tag FL @ 1180' w/WL. RIH OE to 3582'. Spt plug - 200 sx Thixotropic w/LCM. WOC. RIH, jet sub @ 1400', tag up @ 3528'. Drl'd cmt to TD 3648'. Drl'd 14-3/4" hole. Lost circ. Incr air, regained circ. Lost 515 BM/6 hrs since resuming drlg.

PTD: 11,700')

Johnson

8/18-20 Day 37

TD: 3910' (195') - Drlg.

(16" @ 1669')

Air-Foam-Water

Drl'd 14-3/4" hole to 3843'. Lost ret - 500 BM. POH. Check FL - 1450'. RIH OE to 3800'. Set 200 sx plug of thixotropic cmt + LCM + CaCl₂. POH & WOC. RIH w/B#5 & jet sub. Tag cmt @ 3588'. Drl cmt f/3548-3640', pmp LCM pill, no returns. Sht trip, LD jet sub. Drl'd cmt f/3640-3812', no returns, w/gelled wtr & air. POH to 1669'. RU foam equpt, RIH to 2030', brk circ w/foam. RIH to 3050', brk circ. RIH to 3790', could'nt brk circ. POH to 2862', brk circ. RIH to 3326', brk circ. RIH to 3731', brk circ w/wtr, foam & air. Drl'd 14-3/4" hole to PD. Survey: 1-1/2° @ 3792'.

PTD: 11,700')

Johnson

8/21/84 Day 38

TD: 4206' (296') - Drlg.

(16" @ 1669')

Water & air

Drl'd 14-3/4" hole to PD. Drag on connection @ 4118'. Incr'd foam & corr'd problem.

Rocky Mountain		County or Parish Piute	State Utah
Utah High Plateau (Wildcat)		Lease or Unit Rocky Ford	Well no. #1
8/22/84	4513	Day-39 (307') - Drlg. Water & air Drld 14-3/4" hole to PD. Inj 10 bbl wtr w/4 bbl soap/hr.	(16" @ 1669')
8/23/84	4771	Day-40 (258') - Drlg. Water/foam/air Drld 14-3/4" hole to PD.	(16" @ 1669')
8/24/84	4771	Day-41 (0') - Wshg to btm. Water/foam/air POH to DCs, inspect BHA. RIH w/BHA, inspect kelly & svr sub. Set rotating hd bwl, drop bushing pullers in hole. POH w/DCs very slowly w/bit in csghd, retract lockscrews to wear bushing & opnd lwr ram doors. Rec'd bushing pullers. Reset wear bushing & closed ram doors. RIH. Wsh 120' to btm.	(16" @ 1669')
8/25-27	5372	Day-44 (601') - Attempt to brk circ @ 4200'. Wtr/Foam/Air Wshd 120' to btm & drld (inj 10 BW w/3 gal soap/hr). Survey. Circ up smpls @ 5290' (drlg brk f/5269-5288'). Cont drlg w/mist. TOH f/B#8 @ 5372'. TIH to 3500'. Attempt to brk circ, no returns. Cont TIH, tag fill @ 5140'. Survey. Attempt to brk circ, no returns. Surveys: 1/4° @ 4759', 3/4° @ 5140'.	(16" @ 1669')
8/28	5372	Day-45 (0') - Condition hole. Wtr/Foam/Air Unload hole @ 4180'. RIH 5 stds, brk circ @ 4645' w/good returns. RIH 5 stds, brk circ. Ream 5037-5174' w/good returns. After conn, pipe back lashed & stripped out rot table locks. POH checking conn - 7 loose. Rebuilt rot table locks. RIH & ream 5070-5101' - lost returns.	(16" @ 1669')
8/29	5372	Day 46 (0') - Condition hole. Wtr/Foam/Air Wsh & ream 5039-5204', 600 gpm, 3000 scfm - good returns. POH. Chk FL @ 2025', wait to stab. Recheck FL @ 950'. RIH to 2994' w/jet sub @ 1200', brk circ. RIH & tag 3330 of fill. Brk circ w/300 gpm & 700 scfm. No returns. Chg out air booster 3-1/2 hrs.	(16" @ 1669')
8/30	5372	Day-47 (0') - Condition hole. Wtr/Foam/Air Brk circ @ 5040'. Wsh & rm 5049-5204', 300 gpm wtr, 700 scfm air w/jet sub @ 1200' - good returns, no cuttings. 12 std shrt trip, remove jet sub. Tag fill 5045'. Wsh & ream 5045-5372' w/600 gpm wtr, 1600 scfm air & 12 BPH wtr w/soap. Pmp 11-90 bbl vic sweeps w/god returns & fair amt of cuttings. Circ & cond.	(16" @ 1669')
8/31	5372	Day-48 (0') - Condition hole & prep to case Wtr/Foam/Air Circ & cond hole. SPot 80 bbl gel pill on btm. shrt trip, fill @ 5316'. Wsh & rm 5316-5372'. Circ & cond w/hi vis sweeps. POH, LD shock sub & DCs. RI to rm csq. Lack csq tools due to accident. RIH w/DP to cond hole.	(16" @ 1669')

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ARCO Oil and Gas Company
Rocky Mountain District
707 17th Street
Mailing address: P.O. Box 5540
Denver, Colorado 80217
Telephone 303 575 7000



August 13, 1984

RECEIVED

AUG 20 1984

DIVISION OF OIL
GAS & MINING

State of Utah
Department of Natural Resources
Division of Oil, Gas & Mining
4241 State Office Building
Salt Lake City, Utah 84114

Re: Monthly Report of Operations
Well No. Rocky Ford #1
NE SW, Sec. 27-30S-3W
Piute, UT

Gentlemen:

Attached, in duplicate, is the Monthly Report of
Operations for the month of July, 1984,
on the subject well.

This well was spudded on July 14, 1984.

Very truly yours,

B.R. Still, Supervisor
Operations Information Group

BRS:af

Note: "Information Restricted"-Please keep Confidential.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

(FORM 9-329)

(2/76)

OMB 42-RO 356

MONTHLY REPORT
OF
OPERATIONS

Lease No. U-26805
Communitization Agreement No. _____
Field Name Wildcat
Unit Name _____
Participating Area _____
County Piute State UT
Operator Atlantic Richfield Company
 Amended Report (Rocky Ford #1)

The following is a correct report of operations and production (including status of all unplugged wells) for the month of July, 1984

(See Reverse of Form for Instructions)

This report is required by law (30 U.S.C. 189, 30 U.S.C. 359, 25 U.S.C. 396 d), regulation (30 CFR 221.60), and the terms of the lease. Failure to report can result in the assessment of liquidated damages (30 CFR 221.54 (j)), shutting down operations, or basis for recommendation to cancel the lease and forfeit the bond (30 CFR 221.53).

Well No.	Sec. & 1/4 of 1/4	TWP	RNG	Well Status	Days Prod.	*Barrels of Oil	*MCF of Gas	*Barrels of Water	Remarks
1	NESW Sec. 27	30S	3W	DRG	0	0	0	0	This well spudded on 7/14/84. Please see attached drilling report. "Information Restricted"- Please keep Confidential. AUG 20 1984

*If none, so state.

DISPOSITION OF PRODUCTION (Lease, Participating Area, or Communitized Area basis)

	Oil & Condensate (BBLs)	Gas (MCF)	Water (BBLs)
*On hand, Start of Month	0	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
*Produced	0	0	0
*Sold	0	0	XXXXXXXXXXXXXXXXXXXX
*Spilled or Lost	0	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
*Flared or Vented	XXXXXXXXXXXXXXXXXXXX	0	XXXXXXXXXXXXXXXXXXXX
*Used on Lease	0	0	XXXXXXXXXXXXXXXXXXXX
*Injected	0	0	0
*Surface Pits	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	0
*Other (Identify)	0	0	0
*On hand, End of Month	0	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
*API Gravity/BTU Content	0	0	XXXXXXXXXXXXXXXXXXXX

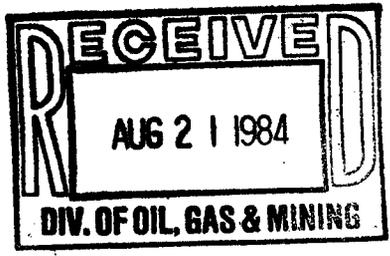
Authorized Signature: B. R. Still Address: P.O. Box 5540, Denver, CO 80211
Title: Supervisor, Operations Info. Group

District Rocky Mountain	County or Parish Piute	State Utah
Field Utah High Plateau (Wildcat)	Lease or Unit Rocky Ford	Well no. #1

CONFIDENTIAL

7/10/84		All loads on loc. Commence RU. (PTD: 11,700')	Johnson
7/11/84		Day -2. Cont RU. (AFE \$3784M)	
7/12/84		Day -3. (0') - Cont RU. Anticipate spud 7/13/84.	
7/13/84	0	Day -4. (0') - Cont RU. Anticipate spud PM 7/13/84.	
7/14-16	102	Day-2 (102') - Circ & cond hole f/conductor. MW: 9.0# Vis: 40 Spud Mud SPUD well 1200 hrs 7/14/84. KB = 22'. Drld 17-1/2" hole to PD & opnd to 32".	
7/17/84	102	Day-3 (0') - NU Diverter. MW: NA Vis: NA Pv/Yp: NA Circ & cond hole. LD DCs & HO. Run 3 jts of 24" 94" welded jt csg. Csg landed @ 102'. Cmt csg w/360 sx Cl "A" cmt w/add. Gd returns w/17 bbl cmt circ to pit. WOC. Cut off csg & wld on fabricated head. NU diverter.	(24" @ 102')
7/18/84	225	Day-4 (123') - Drlg. MW: 8.5# Vis: 32 Pv/Yp: 5/6 NU Diverter, CO conductor & drld 14-3/4" hole to PD.	(24" @ 102')
7/19/84	393	Day-5 (168') - Mix LCM pill. MW: 8.6# Vis: 36 Pv/Yp: 7/9 Drld 14-3/4" hole to 364'. Lost 150 BM. Mix & spt 4 LCM pills (350 bbls total) & regained circ. Drld to PD. Lost full returns. Mix & spt LCM pill (150 bbls) w/o returns. Survey: 1/4° @ 220'.	(24" @ 102')
7/20/84	439	Day-6 (46') - WOC in OH plug. MW: 8.6# Vis: 42 Pv/Yp: 11/10 Mix & spt three (3) 100 bbl 30% LCM pills. Drld 14-3/4" hole to PD w/partial to no returns. Mix mud & TOH. PU 11 jts DP & RIH OE to 335'. RU Howco & spt 125 sx Cl "G" cmt w/add in OH w/FL @ 210'. WOC & pmp 70 bbl mud w/o returns. TIH & tag soft cmt @ 285'. Mix & spt 75 sx Cl "A" cmt w/add. WOC.	(24" @ 102')
7/21-23	943	Day-9 (504') - Drlg w/full returns. MW: 8.5# Vis: 38 Pv/Yp: 10/8 Filled hole & TIH w/bit. Tagged TOC @ 209'. Drld cmt w/full returns & drld ahead to PD. Lost circ @ 743', 759' & 786'. Drld blind f/786-809' & gained circ.	(24" @ 102')

CONFIDENTIAL



*Rec'd
8-20-84*

Utah High Plateau (Wildcat)

Rocky Ford

#1

(AC \$340M)

(AFE \$3784M)

7/24/84 1280

Day-10 (337') - Drlg.

(24" @ 102')

MW: 8.5# Vis: 34 Pv/Yp: 8/6

Drl'd 14-3/4" hole to PD w/partial loss of mud @ 1186'. Surveys: 1/2° @ 1051' & 1186'.

(A)

7/25/84 1359

Day-11 (79') - WOC.

(24" @ 102')

MW: 8.5# Vis: 34 Pv/Yp: 8/6

Drl'd 14-3/4" hole to PD. Lost full returns @ TD. Cln mud pits. RU gas buster & rot hd. TIH w/OE DP. Howco sptd 100 sx Cl "A" w/add @ 1326' & 100 sx Cl "A" w/add @ 1130'. Survey: 3/4° @ 1298'.

7/26/84 1434

Day-12 (77') - Drlg.

(24" @ 102')

MW: 8.6# Vis: 32 Pv/Yp: 6/6 (aerated)

WOC. TIH. Tag cmt @ 1050'. Brk circ w/mud + 330 cfm air. Drl'd cmt 1050-1320'. Drl'd ahead to PD.

7/27/84 1617

Day-13 (183') - Drlg.

(24" @ 102')

MW: 8.5# Vis: 39 Pv/Yp: 8/10 (non-aerated)

Lost full returns @ 1434'. Pull 7 stds. Re-bld mud vol. TIH. Pmp 150 BM & regained full returns. Drl'd & surveyed to PD. Survey: 1° @ 1485'.

7/28-30 1690

Day-16 (73') - Rng 14-3/4" hole to 22" @ 585'.

(24" @ 102')

MW: 8.8# Vis: 37 Pv/Yp: 9/8

Drl'd 14-3/4" hole to PD. POH. PU 22" HO & new BHA. TIH to 102'. Strt opng 14-3/4" hole to 22" to set 16" csg. Mud loss 20 BPH. Surveys: 3/4° @ 1610', 1° @ 1670'.

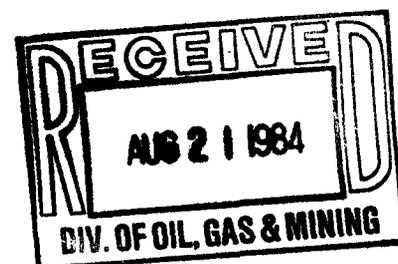
7/31/84 1690

Day-17 (0') - Rng 14-3/4" hole to 22" @ 843'.

(24" @ 102')

MW: 8.8# Vis: 40 Pv/Yp: 10/12

Opng hole prior to rng 16" csa. Lossing 75 BMPH.

~~CONFIDENTIAL~~

rec'd
8-20-84

TIGHT HOLE
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

7. LEASE DESIGNATION AND SERIAL NO.

U-26805

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.
APPLICATION FOR PERMIT— (for such proposals.)

1. OIL WELL <input checked="" type="checkbox"/> WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		2. UNIT AGREEMENT NAME
2. NAME OF OPERATOR ARCO Oil and Gas Company, Division of Atlantic Richfield Company		3. FARM OR LEASE NAME Rocky Ford
3. ADDRESS OF OPERATOR P.O. Box 5540, Denver, Colorado 80217		4. WELL NO. 1
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 2030' FSL & 1645' FWL		5. FIELD AND POOL, OR WILDCAT Wildcat
14. PERMIT NO. 43-031-30012		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 27-30S-3W
15. ELEVATIONS (Show whether OP, RT, CR, etc.) 7236' GL		12. COUNTY OR PARISH Piute
		13. STATE Utah

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"/>	PULL 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 PLANE <input type="checkbox"/>	(Other) <u>N.O. SETTING 16" CASING</u>	
(Other) <input 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.)

Drilled 14-3/4" hole ahead to 1690'. Opened to 22" hole. RU and ran 43 jts (1666.37') 16", 75#, K-55, STC casing and landed @ 1669'. Cemented with 1410 sx lite with 10#/sx gilsonite, 1/4#/sx flocele, 5% salt, 2% CaCl₂, tail in with 1075 sx Class "A", 2% CaCl₂, 1/4#/sx flocele. Good cement returns to surface. Tag cement @ 330'.² Ran 320' of 1" pipe. Cemented with 200 sx Class "G" with 3% CaCl₂, 1/4# flocele, 10# gilsonite + 3/4# tuf plug. Ran 1" pipe to 100'. Cemented with 100 sx Class "G" + 3% CaCl₂. Cement to surface. Tested BOP manifold and kelly cocks to 3000# for 15 mins - OK, blind and pipe rams to 2100 for 15 mins, hydril to 2000# for 15 mins - OK. Drilled cement and drilling ahead 8-7-84.

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AUG 22 1984

DIVISION OF OIL GAS & MINING

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

SIGNED W.A. Walker, Jr. TITLE Operations Manager DATE 8-17-84
(This space for Federal or State office use)

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

*See Instructions on Reverse Side

Page 1
Company
ARCO

Lease and Well Name # Date of test Rig #
Rocky Ford #1 9-11-84 Chase #3

#	Time	
		Left Shop 11:00 got to Rig at 7:00 Rig wasn't ready so we chase the bolts & cleaned the ring grooves etc. 1:30 that night we STARTED stacking. at 7:00 the next morning we had stack nipples up, so we ate a sandwich and Rig up to test manifold.
①	7:58 8:03	1st set of manifold values. Low Test. Changed charts because need a #18000 chart instead of a 2000.
	8:04	High Test on 1st manifold.
②	8:31 8:36	2nd manifold values Low Test. manual choke bonnet links so we tightened it
	8:36	Same Test (low)
	8:40	High Test 2nd manifold.
③	9:10 9:17	Low on Third Manifold. High on Third Manifold.
	Note 9:32	Company hand decides to move blind rams into middle so me & nipple hand break doors, Rig crew is having hell hooking up Cooney lines finally get the Rams hooked up
	11:00 Note	I have them open doors nothing works so I have them just close all rams to get Ram doors open we change Rams & now we TRY to figure out how to shut doors, have to rehook all lines.
	1:00	get all Rams to work except top pipes TOP pipes one side of Rams won't go

Company

Arco

Lease and Well Name #

Rucky Ford 1

Date of Test

9-11-84

Rig #

Chase 3

F# Time

(Continued from one)

1:00 to 2:40

In so we work it turn kramer pressure up add more oil work it some more bleed air out of line work it some more, oil it

2:40

Several times and try everything,

2:40

fuck it. I went to accumulator turned it up full blast. throw the high bypass lever and bam she in. We can horse with you people; we bid this job. I set plug before we nipple up so I'm ready to test blinds right now.

5(4)

2:47

Low Test on Blinds - 1st kill valve outside manifold.

2:52

High Test on same stuff. Crew change so now it takes me 45 minutes to get a joint of pipe up on the floor + the mouse hole etc, tongs everything I need

3:07 to 3:51

get rig up to test pipes & Hydril.

5(5)

3:51

Low Test on top pipes - vertical valve and kill valve.

3:58

High Test on same things

6(6)

4:20

Low Test on top pipes. ~~1 1/2~~ 4" manual & check valves

4:25

High Test on same thing,

7(7)

4:50

Low Test. Top Pipes HCR valve

4:56

High Test on same Ram door leak.

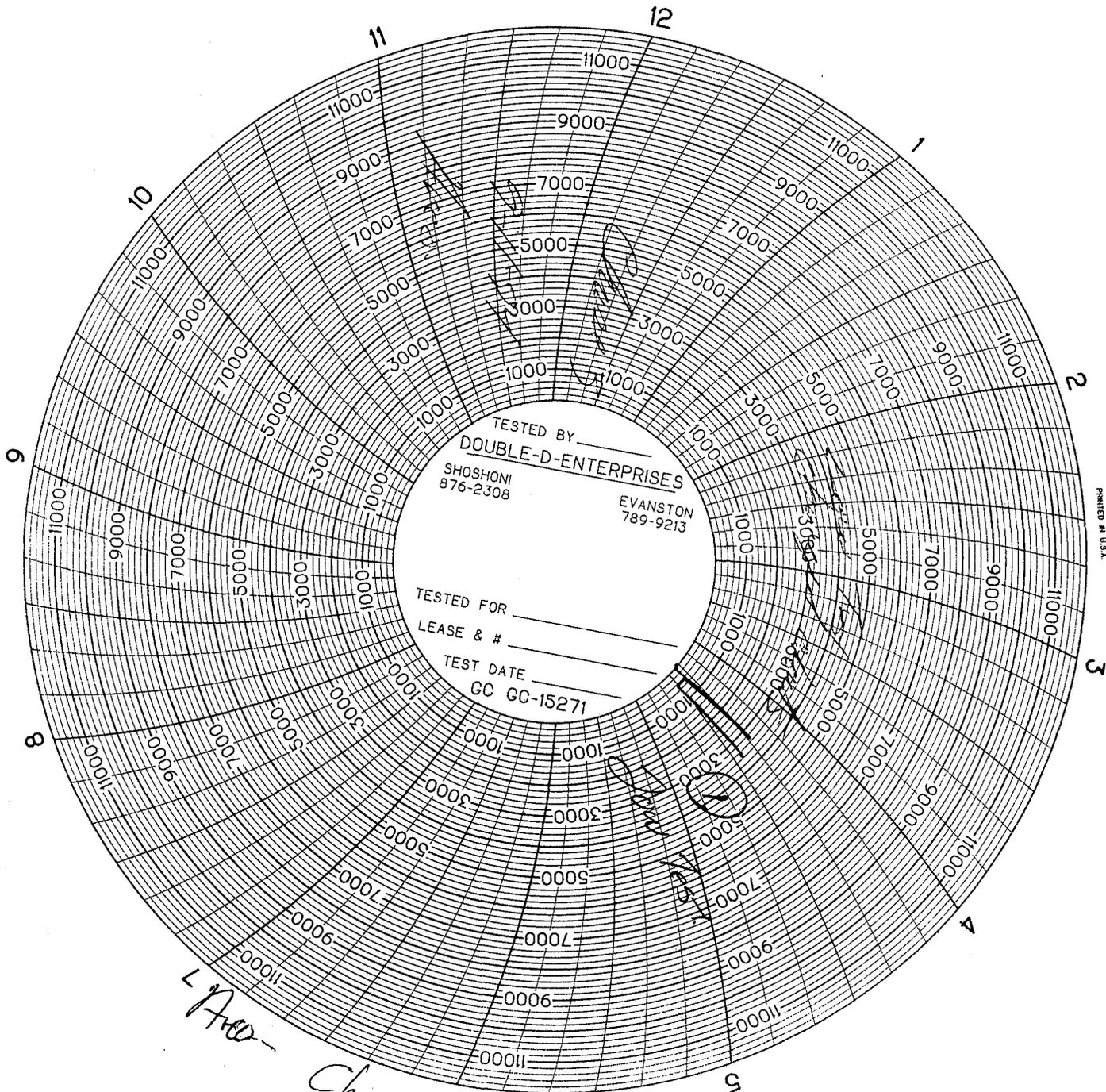
5:16

beat up TRY again. same test OK!

(next page)

page 3
 company _____ Lease and Well Name # _____ Date of test _____ Rig # _____
 Area _____ Reckey Ford 1 _____ 9-11-84 _____ Chase 3

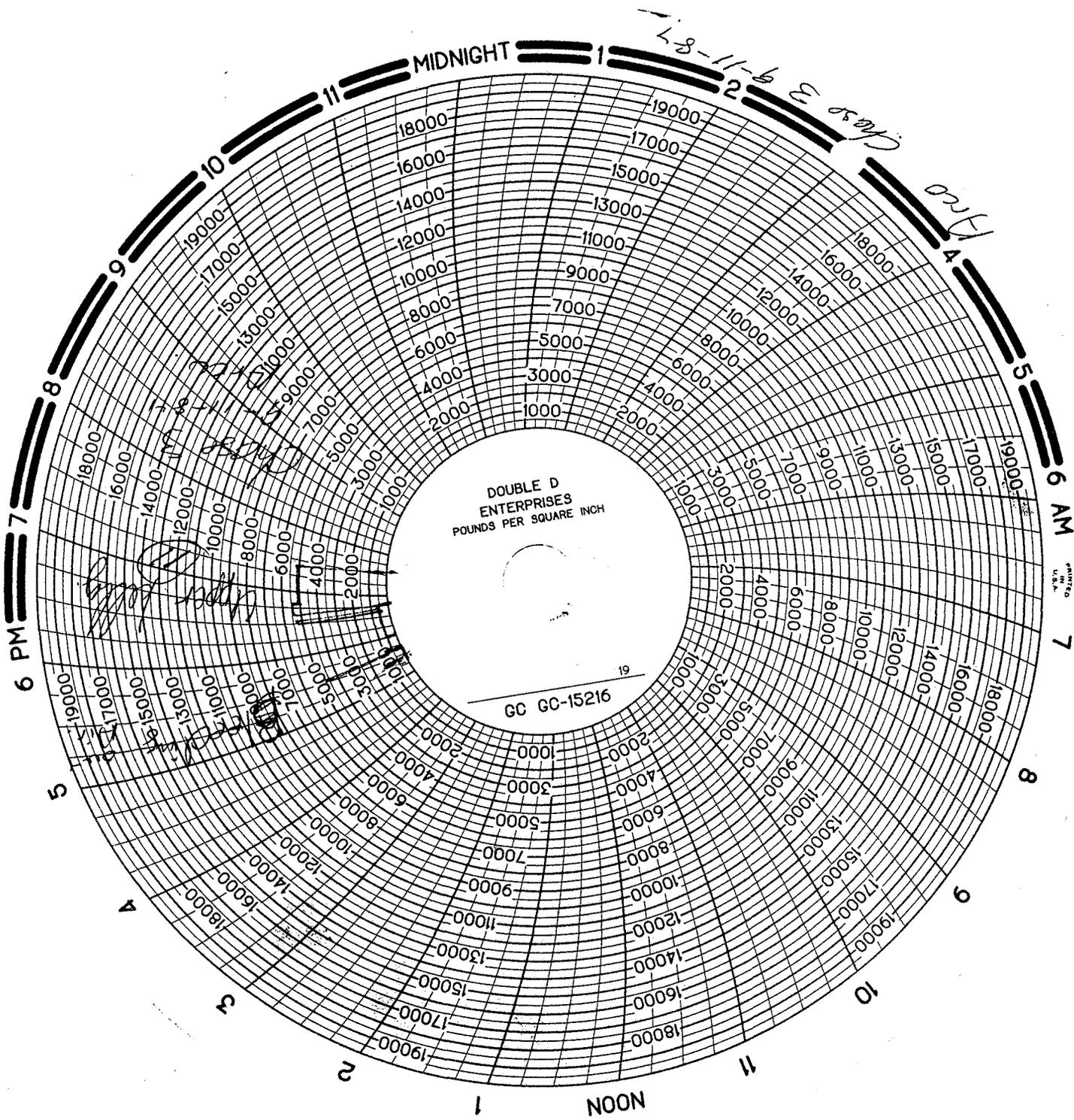
T #	Time	
(8)	5:30	Low Test Lower Pipes.
	5:36	Same thing high.
(9)	5:55	HYDRILL low TEST
	6:00	High test had to jack pressure up to #1500
	6:08	High Test on hydrill Ram door leaks fix it.
	6:10	Hydrill high test.
	6:25	Rig up to Test Kelly. - pull plug break subs. tong up TIW on bottom of Kelly & my sub. while I'm doing this nipple hand males sub up on DAPT valve it won't hold try it several times just leaks a little but you can see it.
(10)	7:15	LOW TEST ON TIW
	7:20	High Test ON TIW
(11)	7:27	Low Test on Upper Kelly.
	7:32	High Test on Upper Kelly.
	7:47 to 8:00	set wear ring.
	8:00 to 9:00	Rig down change clothes
	9:00 - 9:30	make out tickets.
	9:30 to 3:30	go to heber then
	3:30 to 6:30	go to veneer
	6:30 to 7:30	Rig down truck & tools.



TESTED BY _____
DOUBLE-D-ENTERPRISES
 SHOSHONI 876-2308
 EVANSTON 789-9213
 TESTED FOR _____
 LEASE & # _____
 TEST DATE _____
 GC GC-15271

PRINTED IN U.S.A.

L.A. Chase 9-11-84



DOUBLE D
ENTERPRISES
POUNDS PER SQUARE INCH

GC GC-15216

4-8-11-6 E 5000

John Smith

PRINTED
IN
U.S.A.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

(FORM 9-329)
(2/76)

OMB 42-RO 356

MONTHLY REPORT
OF
OPERATIONS

Lease No. U-26805
Communitization Agreement No. _____
Field Name Wildcat
Unit Name _____
Participating Area _____
County Piute State UT
Operator Atlantic Richfield Company

Amended Report (Rocky Ford #1)

The following is a correct report of operations and production (including status of all unplugged wells) for the month of August, 19 84

(See Reverse of Form for Instructions)

This report is required by law (30 U.S.C. 189, 30 U.S.C. 359, 25 U.S.C. 396 d), regulation (30 CFR 221.60), and the terms of the lease. Failure to report can result in the assessment of liquidated damages (30 CFR 221.54 (j)), shutting down operations, or basis for recommendation to cancel the lease and forfeit the bond (30 CFR 221.53).

Well No.	Sec. & 1/4 of 1/4	TWP	RNG	Well Status	Days Prod.	*Barrels of Oil	*MCF of Gas	*Barrels of Water	Remarks
1	NESW Sec. 27	30S	3W	DRG	0	0	0	0	This well spudded on 7/14/84. Please see attached drilling report. SEP 17 1984

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SEP 17 1984

DIVISION OF OIL
GAS & MINING

*If none, so state.

DISPOSITION OF PRODUCTION (Lease, Participating Area, or Communitized Area basis)

	Oil & Condensate (BBLs)	Gas (MCF)	Water (BBLs)
*On hand, Start of Month	0	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
*Produced	0	0	0
*Sold	0	0	XXXXXXXXXXXXXXXXXXXX
*Spilled or Lost	0	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
*Flared or Vented	XXXXXXXXXXXXXXXXXXXX	0	XXXXXXXXXXXXXXXXXXXX
*Used on Lease	0	0	XXXXXXXXXXXXXXXXXXXX
*Injected	0	0	0
*Surface Pits	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	0
*Other (Identify)	0	0	0
*On hand, End of Month	0	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
*API Gravity/BTU Content	0	0	XXXXXXXXXXXXXXXXXXXX

Authorized Signature: B. R. Still Address: P.O. Box 5540, Denver, CO 80217
Title: Supervisor, Operations Info. Group Page 1 of 1

Utah

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SEP 21 1984

DIVISION OF OIL
GAS & MINING

DOUBLE "D" ENTERPRISES

B.O.P. Test Report

B.O.P. TEST PERFORMED ON (DATE).....9-11-84.....

OIL CO.: Arco Oil & Gas.....

WELL NAME & NUMBER Rocky Ford #1.....

SECTION.....27.....

TOWNSHIP.....30S.....

RANGE.....3W.....

COUNTY.....Plute, Utah.....

DRILLING CONTRACTOR.....Chase #3.....

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.....Norman Johnson.....

RIG TOOL PUSHER.....

TESTED OUT OF.....Evanston, Wyoming.....

NOTIFIED PRIOR TO TEST:

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

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

ENTERPRISES
DOUBLE D" TESTING

DELIVERY TICKET

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

Nº 2045

RENTED TO Arco Oil & Gas

NO. Chase #3

DATE 9-11-84

ORDERED BY _____

LEASE Rocky Ford WELL NO. #1

Rental begins when tools leave
be charged as full day.

TRANSPORTATION TO AND

DOUBLE D Portable BLOWOUT

First eight hour test period

Additional eight hours or

Items Tested:

<u>pipe</u> rams to <u>500/5000</u> #	_____ Csg. to _____ #	Choke Manifold <u>500/5000</u> #
<u>Blinds</u> rams to <u>500/5000</u> #	Hydril B O P to <u>300/3000</u> #	Kelly Cock <u>500/5000</u> #
<u>Pipes</u> rams to <u>500/5000</u> #	Choke Line <u>500/5000</u> #	Safety Valve <u>500/5000</u> #
_____ rams to _____ #	_____ #	_____ #

TEST SUBS 4 1/2 x 80 Top + Bottom subs

OTHER 4 1/2 x 80 to 4 1/2 x 80 circulating subs

set wear ring
chased casing head, HCR, First manual
on Kill line, inside manifold

We Appreciate Your Business Thanks

TERMS NET CASH - NO DISCOUNT. (PRICES SUBJECT TO CHANGE WITHOUT NOTICE): Terms and Conditions Under which Tools and Other Equipment Are Rented: Lessor exercises precautions to keep its tools and other equipment in good condition, but does not guarantee its condition. All tools and other equipment rented from Lessor is used at Lessee's sole risk. Lessee agrees that Lessor shall not be liable for any damages for personal injuries to any persons or for any damage to Lessor's property or the property of other persons that may be caused by any of such tools or other equipment, or that may be caused by its failure during use, and Lessee hereby agrees to hold harmless and indemnify Lessor against all persons for all personal injuries and/or property damage. Well conditions which prevent satisfactory operation of equipment do not relieve Lessee of his responsibility for rental charges. Lessee assumes all responsibility for equipment while out of possession of the Lessor and promises to return such equipment to the Lessor in as good condition as it was at the effective date of the lease, natural wear and tear from reasonable use thereof excepted. All equipment lost or damaged beyond repair will be paid for by the Lessee at the market price and all damaged equipment which can be repaired will be repaired and the repairs paid for by the Lessee. Accrued rental charges cannot be applied against the purchase price or cost of repairs of such damaged or lost equipment. All transportation charges must be borne by the Lessee. Rental begins when equipment leaves Lessor's yard and continues until returned thereto. ALL TOOLS AND EQUIPMENT SHALL REMAIN the sole property of Lessor. This lease is made and shall be effective when the equipment is delivered to the carrier selected by the Lessee.

TERMS: Net Cash - No Discount. All charges are due and payable at the office of Lessor in Shoshoni, Wyoming on the 20th of the month following date of invoice. Interest will be charged at the rate of 8%. Interest charged after 60 days from date of invoice.

Delivered By: Rich

OWNER OR OWNER'S REPRESENTATIVE

By: Mike Dehnam

By: Norman Johnson

9/1-4 5372

Day-52 (0') - Inspect BHA

(16" @ 1669')

Wtr/Foam/Air

RIH, brk circ @ 3500' - good returns. RIH, tag fill @ 5240'. Circ w/600 gpm wtr & 1600 cfm - no returns. POH 7 stds, brk circ, good returns. RIH, tag fill @ 5177'. Brk circ w/good returns. Wsh dwn 3', circ 600 gpm wtr & 1600 cfm air @ 500 psi, press incr'd to 2100# & stuck pipe. Wrk stuck pipe & pmp vis sweeps @ 2200# - would not bleed below 1600# w/pmp off. Wrkd pipe out 25', press drop to 1400#. Try to brk circ w/air, ran out of wtr in res pit. Brk circ f/15 min then lost circ. Cont to wrk pipe & pmp vis sweeps. WO free pt eqpt. RU & run free pt, stuck @ 4864' (top of DCs). Backed off @ 4864'. POH. RIH w/fshg tools, engage fsh, drove fsh dwn 2', commenced jarring. Fsh came loose. POH. Dropped bit, BS, DC's & fshg tools in hole. RIH & recovr fsh. Magnaflux BHA.

(PTD: 11,700')

9/5 5372

Day-53 (0') - Running 10-3/4" csg

(16" @ 1669')

Wtr/Foam/Air

LD BHAs. PU csg crew & ran 52 jts csg.

(PTD: 11,700')

9/6/84 5372

Day-54 (0') - WO 9-1/2" bit, spider, & slips

(16" @ 1669')

Wtr/Foam/Air

Ran 101 jts 10-3/4" csg to 4526'. Csg collapsed in slips. Pulled 23 jts - found 4 collapsed & 18 jts w/bad threads. Cln & inspect csg on racks. WO bit, spider, & slips to run 9-1/2" bit to check gauge.

9/7/84 5372

Day-55 (0') - Cmt 10-3/4"

(10-3/4" @ 5015')

Wtr/Foam/Air

RIH w/9-1/2" bit to 1000'. POH. Resume rng 10-3/4", 55.5#, L-80 & 65.7#, SS-95, ST&C. Set @ 5015'. Cmt thru shoe w/400 sx Howco Lite + LCM & 1000 sx "H" + LCM & displc w/o bmg plug. No returns. Displc parasite string. Opn DV tool. Circ thru DV while WOC. Cmt thru DV w/1300 sx lite + LCM & 100 sx "H" w/add. Drop plug & displc. Close DV tool. No returns. CIP @ 0540 hrs, 9/7/84.

9/8-10 5372

Day-58 (0') - Drlg on stage clr.

(10-3/4" @ 5015')

Wtr

With 1" @ 300' in 16" x 10-3/4", pmp LCM pill. Pmp 75 sx Cl "A" + 2% CaCl₂. WOC. RIH to 325'. Pmp 225 sx "A" + 2% CaCl₂, no returns. WOC. Run 1" to 325', no cmt. WOC. Rev thru parasite string, OK. Cmt w/200 sx Cl "A" + 3% CaCl₂, gd returns. Cmt to surf. WOC. ND 16" BOP. Cut off 10-3/4" & weld on csgnd. No 13-5/8" BOPs. RIH w/ 9-1/2" bit & drld on DV clr.

9/11/84 5372

Day-59 (0') - WO RTTS pkr.

(10-3/4" @ 4993')

Wtr

Drld DV @ 2618'. RIH to 4792'. Drld cmt to 4992'. POH. Run CBL. RIH 8 stds DP, POH & LD same. RIH to 4950'. Tst csg to 1400# - bled to 900# in 15 min. WO RTTS to locate leak.

9/12/84 5372

Day-60 (0') - RU to cmt 10-3/4" shoe.

(10-3/4" @ 4993')

Wtr

POH. WO RTTS (2 hrs). RIH w/RTTS, set @ 2965'. Pmp 15 BW dn DP 4 BEM @ 1000#, SIP 350# bleeding to 0# in 5 min. Tst backside to 1500# f/15 min - OK. RIH, set pkr @ 4862'. Tst csg to 1500# f/15 min - OK. RU to cmt 10-3/4" shoe.

District	County or Parish	State
Rocky Mountain	Piute	Utah
Field	Lease or Unit	Well no.
Utah High Plateau (Wildcat)	Rocky Ford	#1
9/13/84 5372	Day-61 (0') - RD Schl. (10-3/4" @ 4993') Wtr Set pkr @ 4862'. Cmt 10-3/4" shoe w/200 sx "H" w/2% CaCl ₂ (38.5 bbls). Displ w/65 bbls H ₂ O. Press up to 2000#, held 22 bbl cmt in fm, 11 bbls in csg & 5 bbls in DP. Rev out 5 bbls cmt. Reset pkr, press up to 2000#. Held 15 min, rel'd pkr & POH. TIH w/bit to 4475'. WOC 5 hrs. Cont TIH, tag cmt @ 4862'. Drld cmt to 4975'. Circ & cond hole. TOH w/bit. RU Schl & ran CBL f/4966-3900'. RD Schl.	
9/14/84 5372	Day-62 (0') - Wash & rm. (10-3/4" @ 4993') MW: 8.4# Vis: 40 Pv/Yp: 8/10 RD Schl. RIH w/ 9-1/2" bit. Drld cmt 4975-4996'. Wash & rm 4996-5049'. Got stuck 5 times. Wrkd pipe & jarred free. Wash & rm 5049-5081'.	
9/15-17 5372	Day-65 (0') - Wash & rm. (10-3/4" @ 4993') MW: 8.6# Vis: 65 Pv/Yp: 18/28 Wash & rm. Sht trip. Resumed rmg. Stuck pipe & jarred free. DP pressured up. Pull 3 stds. Circ OK. RIH. Tag up @ 5049'. POH. LD SS & 12 DCs. RIH. Wash & rmd 5040-5150'. Jar stuck pipe. Resume rmg. DP pressured up. POH to csg, unplug jet. POH. Remove nozzels. RIH. Tag fill 5020'. Wash & rm. Jar stuck pipe @ 5144'. Wash & rm. Stuck again @ 5144' & jarred same free. Wash & rm 5144-5165'. Lost hole back to 5155'.	
9/18/84 5372	Day-66 (0') - RIH w/OE DP. (10-3/4" @ 4993') MW: 8.5# Vis: 66 Pv/Yp: 19/28 Wash & rm to 5165'. Sht trip, tag fill @ 5054'. 4 add'l sht trips, tag fill @ 5052' ea time. POH. RIH OE & WOC cmt.	
9/19/84 5372	Day-67 (0') - WOC. (10-3/4" @ 4993') MW: 8.5# Vis: 66 Pv/Yp: 19/28 RIH w/OE DP to 5052'. Spt 500 sx plug Cl "H". CIP 1000 hrs 9/18/84. POH 15 stds, rev out. Press up to 250# & hold f/3 hrs. POH. WOC. RIH to 4960', no cmt. POH to 4400' & circ out w/tr cmt. RIH to 4998', tag soft cmt. Wash to 5005', held 10M# wt. POH to 4960'. Circ & WOC.	
9/20/84 5372	Day-68 (0') - WOC (10-3/4" @ 4993') Wtr WOC. Drld cmt 5005-5020'. POH. RIH w/OE DP to 5020'. Set 200 sx plug of Cl "H" + 2% CaCl ₂ . Pull 10 stds & rev out. Press csg to 250# & held f/ 2-1/2 hrs. POH. RIH w/bit to 4102'. Circ & WOC.	
9/21/84 5372	Day-69 (0') - Wash & rm. (10-3/4" @ 4993') MW: 8.6# Vis: 68 Pv/Yp: 22/26 WOC. Tag cmt @ 4570'. Drld cmt w/ 9-1/2" bit 4570-5054'. Displ'd hole to mud. Wash & rm 5054-5086'.	
9/22-24 5372	Day-72 (0') - Fshg. (10-3/4" @ 4993') MW: 8.6# Vis: 69 Pv/Yp: 17/24 Wash & rm to 5240'. Stuck pipe w/bit @ 5193'. Jar on same. Run free pt. BO @ top of jars @ 4971'. PU 5'. Circ @ top of fsh w/lrge amt of cuttings.	

Field	County or Parish	State
Rocky Mountain	Piute	Utah
Utah High Plateau (Wildcat)	Rocky Ford	Well no. #1
9/25/84 5372	Day-73 (0') - Wsh & rm. (10-3/4" @ 4993') MW: 8.7# Vis: 67 Pv/Yp: 17/20 Circ @ top of fsh @ 4971'. POH. Rec'd three (3) 6-1/2" DCs. PU 3 jts wshover pipe. RU McCull. Attempt to run csg inspection log - tools wouldn't wrk. RIH w/wsh pipe, tag fill @ 4873'. Wshg & rmg @ 4879'.	
9/26/84 5372	Day-74 (0') - RIH w/fshg tools. (10-3/4" @ 4993') MW: 8.7# Vis: 70 Pv/Yp: 20/24 Wsh & rm to 4969'. POH w/wsh pipe. Chg shoe & RIH w/wsh pipe. Wrk over fsh @ 4970'. Wsh over 4970-5064'. Spt hi-vis mud on btm. POH. RIH w/screw-in sub.	
9/27/84 5372	Day-75 (0') - Circ & cond mud. (10-3/4" @ 4993') MW: 8.6# Vis: 50 Pv/Yp: 16/13 FIH. Screw into fsh. Jarred fsh free. POH. Rec'd all fsh. LD fshg tools. PU bit & BHA & RIH. Circ & cond mud.	
9/28/84 5372	Day-76 (0') - WOO. (10-3/4" @ 4993') MW: 8.6# Vis: 175 Pv/Yp: 28/35 Circ & cond mud. Tag fill @ 5147'. Wsh & rm 5147-5153'. POH to 4928' & wait 4-1/2 hrs. RIH & tag up @ 5135'. POH. Run cal log. RIH OE. WOO.	
9/29-10/1 5372	Day-79 (0') - POH. (10-3/4" @ 4993') MW: 8.7# Vis: 150 Pv/Yp: 34/40 POH. PU BHA w/jet sub & RIH. Wsh & rm 4927-5087'. Pipe torqued up & press jumped to 3000#. Stuck pipe. Jarred free & POH to 4992'. Wrkd pipe f/4992-4927' & POH. Chg bit to 7-7/8" & PU new jet sub. RIH. Wsh & rm 4960-5024'. POH into csg. RIH. Wsh & rm 5094-5145'. POH. Ran cal log 5138-4993'. RIH w/ 7-7/8" bit & tag up @ 5139'. RIH w/catcher bushing & wsh pipe. Tag fill @ 5134'. Rnd in fill 5134-5140'. POH.	

TWO HOLE
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPlicate
Other instructions on reverse side.

Form approved
Budget Bureau No. 1004-0135
Expires August 31, 1985

LEASE DESIGNATION AND SERIAL NO
U-26805

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. WELL TYPE OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/></p> <p>2. NAME OF OPERATOR ARCO Oil and Gas Company, Division of Atlantic Richfield Company</p> <p>3. ADDRESS OF OPERATOR P.O. Box 5540, Denver, Colorado 80217</p> <p>4. LOCATION OF WELL Report location clearly and in accordance with any State requirements. See also space 17 below. AT SURFACE 2030' FSL & 1645' FWL</p> <p>14. PERMIT NO. 43-031-30012</p>	<p>6. UNIT AGREEMENT NAME ---</p> <p>5. FARM OR LEASE NAME Rocky Ford</p> <p>8. WELL NO. 1</p> <p>10. FIELD AND POOL, OR WILDCAT Wildcat</p> <p>11. SEC. T. R. M. OR BLM. AND SURVEY OR AREA 27-30S-3W</p> <p>12. COUNTY OR PARISH 13. STATE Piute Utah</p>
<p>15. ELEVATIONS (Show whether of, to, or, etc.) 7236' GL</p>	

CONFIDENTIAL

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"/>	PULL 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) <input checked="" type="checkbox"/> N.O. SETTING 10-3/4" casing	
(Other) <input type="checkbox"/>			

(NOTE: Report results of multiple completion or 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.)

Drilled ahead to 5372'. RU and ran 101 jts 10-3/4", 55.5#, L-80, STC casing and 11 jts 10-3/4", 65.7#, SS-95, STC casing and set @ 5015'KB. Circulate 250 bbls water. Cement as follows: 1st stage- 400 sx lite with 15#/sx gilsonite followed with 1000 sx Class "H" with thix-set additives, 10#/sx gilsonite and 1/4#/sx flocele. Circl stage tool. Cement through DV tool with 1300 sx 65/35 lite cement with thix-set additives, 10#/sx gilsonite + 1/4#/sx flocele followed by 100 sx Class "H" with 2% CaCl₂. Cement with 75 sx Class "A" and 2% CaCl₂ thru 1" @ 300'. Run 1" pipe to 325'. Cement with 225 sx Class "A" + 2% CaCl₂. Cement with 200 sx Class "H" + 3% CaCl₂. Good returns to surface. NU BOPs and pressure test to 500 and 5000 psi - OK. Drilled cement and drilling ahead 9-12-84.

RECEIVED

OCT 3 1984

DIVISION OF OIL
GAS & MINING

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

SIGNER L.B. Morse TITLE Operations Manager DATE 9-26-84

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY: _____

*See Instructions on Reverse Side

District	County or Parish	State
Rocky Mountain	Piute	Utah
Field	Lease or Unit	Well no.
Utah High Plateau (Wildcat)	Rocky Ford	#1

~~CONFIDENTIAL INFORMATION~~

9/29-10/1 5372 Day-79 (0') - POH. (10-3/4" @ 4993')
 MW: 8.7# Vis: 150 Pv/Yp: 34/40
 POH. PU BHA w/jet sub & RIH. Wsh & rm 4927-5087'. Pipe torqued up & press jumped to 3000#. Stuck pipe. Jarred free & POH to 4992'. Wrkd pipe f/4992-4927' & POH. Chg bit to 7-7/8" & PU new jet sub. RIH. Wsh & rm 4960-5024'. POH into csg. RIH. Wsh & rm 5094-5145'. POH. Ran cal log 5138-4993'. RIH w/ 7-7/8" bit & tag up @ 5139'. RIH w/catcher bushing & wsh pipe. Tag fill @ 5134'. Rmd in fill 5134-5140'. POH.

10/2/84 5372 Day-80 (0') - WOC. (10-3/4" @ 4993')
 MW: 8.7# Vis: 110 Pv/Yp: 32/37
 POH w/wsh pipe & catcher bushing. Rec'd 3 lrg pcs rock. RIH OE to 4989'. WO Howco. RIH to 5135'. Set a 225 sx plug of Cl "H". POH 8 stds & rev out. Close rams & sqz 20 bbls. SIDP press 875#. POH. RIH w/bit to 4000'. WOC.

10/3/84 5372 Day-81 (0') - Wshg & rmg. (10-3/4" @ 4993')
 MW: 8.4# Vis: 88 Pv/Yp: 28/28
 WOC. RIH. Tag cmt @ 5078'. POH to 4965' & displ hole to wtr. RIH, tag cmt @ 5078' to 5098' - vy soft. POH to 4965' & WOC. RIH. Drld cmt w/ 9-1/2" bit 5098-5135'. Displ hole to mud. Wsh & rm in rubble @ 5135'. Rmd to 5140' twice w/hi torque & drag. Hole fell in to 5135' ea time.

10/4/84 5372 Day-82 (0') - LD wsh pipe. (10-3/4" @ 4993')
 MW: 8.7# Vis: 140 Pv/Yp: 32/38
 Wsh & rm 5135-5140' w/torque & drag when PU. POH. RIH w/ 8-1/8" wsh pipe, catcher bushing & mill. Tag up @ 5137', wsh thru rocks to 5141'. POH. Recover 6 lrg rocks.

10/5/84 5372 Day-83 (0') - RIH w/ 8-1/2" bit. (10-3/4" @ 4993')
 MW: 8.7# Vis: 145 Pv/Yp: 31/36
 PU 8-1/2" mill & RIH. Wsh & mill 5138-5144'. POH. PU 8-1/8" wsh pipe w/Globe bskt & RIH. Tag up @ 5139'. Wsh over rocks 5139-5144'. POH & LD wsh pipe. Rec'd 3 lrg rocks & 6 med rocks. RIH w/ 8-1/2" bit.

10/6-8 5372 Day-86 (0') - Drlg cmt @ 5148'. (10-3/4" @ 4993')
 MW: 8.7# Vis: 130 Pv/Yp: 27/32
 RIH w/ 8-1/2" bit. Wsh & rm 5144-5152'. Set 225 sx Cl "H". Pull 8 stds. Sqz 15 bbls @ 850#. POH. WOC. RIH to 4368'. Displ'd hole w/wtr. Tag cmt 4937'. Drld cmt 4937-5115'. POH. RIH w/mill. Displ hole w/mud. Mill f/5115-5142'. POH. Chg mills. RIH. Hit tite spt @ 4488'. POH. Mill over guage 1/16". RIH w/bit. Drld cmt 5142-5148'.

10/9/84 5372 Day-87 (0') - Wshg & rmg. (10-3/4" @ 4993')
 MW: 8.7# Vis: 155 Pv/Yp: 28/33
 Drld cmt w/ 9-1/2" bit. Wsh & rm 5148-5202' w/ 9-1/2" bit.

10/10/84 5372 Day-88 (0') - Wshg & rmg @ 5255'. (10-3/4" @ 4993')
 MW: 8.7# Vis: 155 Pv/Yp: 31/40
 Wsh & rm 5202-5213'. Drop survey & POH. Survey misrun. RIH w/ 9-1/2" bit. Wsh & rm 5213-5255'.

~~CONFIDENTIAL INFORMATION~~

District	County or Parish	State
Rocky Mountain	Piute	Utah
Field	Lease or Unit	Well no.
Utah High Plateau (Wildcat)	Rocky Ford	#1

CONFIDENTIAL INFORMATION

- 10/11/84 5372 Day-89 (0') - Wshg & rmg. (10-3/4" @ 4993')
 MW: 8.7# Vis: 147 Pv/Yp: 33/42
 Wsh & rm 5255-5278'. POH. chg bit. RIH. Wsh & rm 5278-5300'. Survey: 1° @ 5278'.
- 10/12/84 5372 Day-90 (0') - Wshg & rmg @ 5370'. (10-3/4" @ 4993')
 MW: 8.8# Vis: 149 Pv/Yp: 35/44
 Wsh & rm 5300-5370'.
- 10/13-15 5385 Day-93 (13') - Wshg & rmg @ 5315'. (10-3/4" @ 4993')
 MW: 8.7# Vis: 160 Pv/Yp: 26/32
 Wsh & rm to 5372'. Drld 9-1/2" hole to 5385'. POH to 4895'. RIH to 5385'.
 No fill. POH. WO csg. Ran 15 jts 8-5/8" lnr. Tagged up @ 5282'. Wrk to 5285'. POH, LD lnr. RIH. Rnd 5269-5385'. POH. RU rhrs. RIH. Wsh & rm 4995-5315' w/tite spts 5260-5285', 5288', 5290' & 5297'.
- 10/16-17 5385 Day-95 (0') - RIH w/bit. (8-5/8" @ 5385')
 MW: 8.7# Vis: 52 Pv/Yp: 16/17
 Wsh & rm w/ 9-1/2" bit 5315-5385'. Sht trip - no fill. POH. PU & RIH w/ 8-5/8" 32# S-80 AB-FL4S lnr. RIH to 4950' & circ. RIH & set lnr w/shoe @ 5385' & top of hgr @ 4766'. Cmt w/175 sx Cl "H". POH w/setting tools & WOC. Tst BOPs. Inspect BHA. RIH w/ 9-1/2" bit.
- 10/18/84 5385 Day-96 (0') - CO liner. (8-5/8" @ 5385')
 MW: 8.8# Vis: 58 Pv/Yp: 15/17
 RIH w/ 9-1/2" bit & tag cmt @ 4686'. Drld cmt to 4765'. POH & PU 7-7/8" bit. RIH to 5272'. Drlg out cmt in 8-5/8" lnr.
- 10/19/84 5385 Day-97 (0') - TOH w/magnet. (8-5/8" @ 5385')
 MW: 8.6# Vis: 42 Pv/Yp: 12/10
 Drld cmt to 5384'. Press tst csg to 1500 psi - OK. Drld on GS. TOH, left 3 cones. TIH w/magnet & JS & circ'd. TOH, rec'd 1-1/2 cones & aluminum. RIH w/magnet & JS & circ'd on rk. TOH.
- 10/20-22 5720 Day-100 (335') - Drlg. (8-5/8" @ 5385')
 MW: 8.7# Vis: 38 Pv/Yp: 10/11
 POH w/magnet. Rec'd 4 lrg pcs of steel. RIH w/bit & JS. Drld 5385-90'. POH. Rec'd some aluminum. RIH & wsh on jk. POH, rec'd pcs of cone. RIH. Drld 7-7/8" hole to 5639'. Lost returns. Pull into csg shoe. Mix LCM. POH. Instl rotating hd. RIH. Tag fill @ 5596'. Drld 7-7/8" hole to PD w/mud & air dn parasite string. Survey: 1-1/2° @ 5591'.
- 10/23/84 6045 Day-101 (325') - Drlg. (8-5/8" @ 5385')
 MW: 8.9# Vis: 36 Pv/Yp: 9/10
 Drld 7-7/8" hole to PD w/lost returns @ 5942'. Mix LCM & regained returns
- 10/24/84 6203 Day-102 (158') - Drlg. (8-5/8" @ 5385')
 MW: 8.6# Vis: 37 Pv/Yp: 9/12
 Drld 7-7/8" hole to PD w/TFNB @ 6160'. Survey: 2-1/2° @ 6168'.

District Rocky Mountain	County or Parish Piute	State Utah
Field Utah High Plateau (Wildcat)	Lease or Unit Rocky Ford	Well no. #1

10/25/84 6400

Day-103 (197') - Drlg. (8-5/8" @ 5385')
 MW: 8.6# Vis: 38 Pv/Yp: 9/10
 Drld 7-7/8" hole to PD. Survey: 3° @ 6210'.

10/26/84 6560

Day-104 (160') - Drlg. (8-5/8" @ 5385')
 MW: 8.6# Vis: 36 Pv/Yp: 9/8
 Air dn parasite string.
 Drld 7-7/8" hole to PD w/TFNB @ 6490'. Survey: 2° @ 6490'.

CONFIDENTIAL INFORMATION

10/27-29 7089

Day-107 (529') - Drlg. (8-5/8" @ 5385')
 MW: 8.7# Vis: 38 Pv/Yp: 10/7 (250 gpm)
 Air dn parasite string to 2523' (800 cfm)
 Drld 7-7/8" hole to PD w/TFNB @ 6930'. Survey: 1° @ 6930'.

10/30/84 7220

Day-108 (131') - Drlg. (8-5/8" @ 5385')
 MW: 8.8# Vis: 37 Pv/Yp: 9/4 (250 gpm)
 Air dn parasite string to 2523' (800 cfm)
 Drld 7-7/8" hole to PD.

10/31/84 7370

Day-109 (150') - Drlg ahead. (8-5/8" @ 5385')
 MW: 8.8# Vis: 36 Pv/Yp: 9/5 (250 gpm)
 Air dn parasite string to 2523' (800 cfm)
 Drld 7-7/8" hole to PD. Circ smpls @ 7285', 7300' & 7310'.

ARCO Oil and Gas Company
Rocky Mountain District
707 17th Street
Mailing address: P.O. Box 5540
Denver, Colorado 80217
Telephone 303 575 7000



CONFIDENTIAL

October 10, 1984

RECEIVED

OCT 17

**DIVISION OF OIL
GAS & MINING**

State of Utah
Department of Natural Resources
Division of Oil, Gas & Mining
4241 State Office Building
Salt Lake City, Utah 84114

Re: Monthly Report of Operations
Well No. Rocky Ford #1
NE SW, Sec. 27-30S-3W
Piute, UT

Gentlemen:

Attached, in duplicate, is the Monthly Report of Operations for the month of September, 1984, on the subject well.

This well was spudded on July 14, 1984.

Very truly yours,

B.R. Still / me

B.R. Still, Supervisor
Operations Information Group

BRS:af

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
(FORM 9-329)
(2/76)
OMB 42-RO 356

MONTHLY REPORT
OF
OPERATIONS

Lease No. U-26805
Communitization Agreement No. _____
Field Name Wildcat
Unit Name _____
Participating Area _____
County Piute State UT
Operator Atlantic Richfield Company
 Amended Report (Rocky Ford #1)

The following is a correct report of operations and production (including status of all unplugged wells) for the month of September, 19 84

(See Reverse of Form for Instructions)

This report is required by law (30 U.S.C. 189, 30 U.S.C. 359, 25 U.S.C. 396 d), regulation (30 CFR 221.60), and the terms of the lease. Failure to report can result in the assessment of liquidated damages (30 CFR 221.54 (j)), shutting down operations, or basis for recommendation to cancel the lease and forfeit the bond (30 CFR 221.53).

Well No.	Sec. & 1/4 of 1/4	TWP	RNG	Well Status	Days Prod.	*Barrels of Oil	*MCF of Gas	*Barrels of Water	Remarks
1	NESW Sec. 27	30S	3W	DRG	0	0	0	0	This well spudded on 7/14/84. Please see attached drilling report.

*If none, so state.

DISPOSITION OF PRODUCTION (Lease, Participating Area, or Communitized Area basis)

	Oil & Condensate (BBLs)	Gas (MCF)	Water (BBLs)
*On hand, Start of Month	0	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
*Produced	0	0	0
*Sold	0	0	XXXXXXXXXXXXXXXXXXXX
*Spilled or Lost	0	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
*Flared or Vented	XXXXXXXXXXXXXXXXXXXX	0	XXXXXXXXXXXXXXXXXXXX
*Used on Lease	0	0	XXXXXXXXXXXXXXXXXXXX
*Injected	0	0	0
*Surface Pits	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	0
*Other (Identify)	0	0	0
*On hand, End of Month	0	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
*API Gravity/BTU Content	0	0	XXXXXXXXXXXXXXXXXXXX

Authorized Signature: B.R. Steel Address: P.O. Box 5540, Denver, CO 80211
Title: Supervisor, Operations Info. Group Page 1 of 1

TIGHT HOLE.
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPlicate.
(Other instructions on re-
verse side.)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

2. LEASE DESIGNATION AND SERIAL NO.
U-26805

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		7. UNIT AGREEMENT NAME
2. NAME OF OPERATOR ARCO Oil and Gas Company, Division of Atlantic Richfield Company		8. FARM OR LEASE NAME Rocky Ford
3. ADDRESS OF OPERATOR P.O. Box 5540, Denver, Colorado 80217		9. WELL NO. 1
4. LOCATION OF WELL - Report location clearly and in accordance with any State requirements. See also space 17 below. At surface 2030' FSL & 1645' FWL		10. FIELD AND POOL, OR WILDCAT Wildcat
14. PERMIT NO. 43-031-30012		11. SEC., T., R., M., OR S.E. AND SURVEY OR AREA 27-30D-3W
15. ELEVATIONS (Show whether OP, RT, CR, etc.) 7236' GL		12. COUNTY OR PARISH Piute
		13. STATE Utah

CONFIDENTIAL

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANE <input type="checkbox"/>
(Other) <input type="checkbox"/>	

SUBSEQUENT REPORT OF:

WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
(Other) Casing <input type="checkbox"/>	

(NOTE: Report results of multiple completion on Well Completion or Recombination 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.)

CORRECT DEPTH FOR 10-3/4" CASING @ 4993'.

Drilled ahead to 5385'. RU and ran 15 jts (610.82') 8-5/8" 32# casing and set @ 4766'-5385'. Cemented with 175 sx Class "H" cement. Displace with 99 BM. Tested BOP to 3000 psi - held OK. Drilled cement and drilling ahead 10-20-84.

RECEIVED

NOV 9 1984

DIVISION OF OIL GAS & MINING

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

SIGNER L.B. Morse TITLE Operations Manager DATE 10-29-84

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

ARCO Oil and Gas Company
Rocky Mountain District
707 17th Street
Mailing address: P.O. Box 5540
Denver, Colorado 80217
Telephone 303 575 7000



November 9, 1984

State of Utah
Department of Natural Resources
Division of Oil, Gas & Mining
4241 State Office Building
Salt Lake City, Utah 84114

RECEIVED

NOV 13 1984

DIVISION OF OIL
GAS & MINING

Re: Monthly Report of Operations
Well No. Rocky Ford #1
NE SW, Sec. 27-30S-3W
Piute, UT

Gentlemen:

Attached, in duplicate, is the Monthly Report of Operations for the month of October, 1984, on the subject well.

This well was spudded on July 14, 1984.

Very truly yours,

B.R. Still, Supervisor
Operations Information Group

BRS:af

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

Form 3160-6
(November 1983)
(Formerly 9-329)

**MONTHLY REPORT
OF
OPERATIONS**

Lease No. U-26805
Communitization Agreement No. _____
Field Name Wildcat
Unit Name _____
Participating Area _____
County Piute State UT
Operator Atlantic Richfield Company
 Amended Report (Rocky Ford #1)

The following is a correct report of operations and production (including status of all unplugged wells) for the month of October, 1984

(See Reverse of Form for Instructions)

This report is required by law (30 U.S.C. 189, 30 U.S.C. 359, 25 U.S.C. 396d), regulation (43 CFR 3162.4-3), and the terms of the lease. Failure to report can result in the assessment of liquidated damages, (43 CFR 3160), penalties, shutting down operations, or basis for recommendation to cancel the lease and forfeit the bond (43 CFR 3160).

Well No.	Sec. & 1/4 of 1/4	TWP	RNG	Well Status	Days Prod.	*Barrels of Oil	*MCF of Gas	*Barrels of Water	Remarks
1	NE SW Sec. 27	30S	3W	DRG	0	0	0	0	This well was spudded on 7/14/84. Please see attached drilling report.

RECEIVED

NOV 13 1984

DIVISION OF OIL
GAS & MINING

CONFIDENTIAL

*If none, so state.

DISPOSITION OF PRODUCTION (Lease, Participating Area, or Communitized Area basis)

	Oil & Condensate (BBLs)	Gas (MCF)	Water (BBLs)
*On hand, Start of Month	0	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
*Produced	0	0	0
*Sold	0	0	XXXXXXXXXXXXXXXXXX
*Spilled or Lost	0	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
*Flared or Vented	XXXXXXXXXXXXXXXXXX	0	XXXXXXXXXXXXXXXXXX
*Used on Lease	0	0	XXXXXXXXXXXXXXXXXX
*Injected	0	0	0
*Surface Pits	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	0
*Other (Identify)	0	0	0
*On hand, End of Month	0	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
*API Gravity/BTU Content	0	0	XXXXXXXXXXXXXXXXXX

Authorized Signature: B. P. Stille Address: P.O. Box 5540, Denver, CO 80217
Title: Supervisor, Operations Info. Group Page 1 of 1

TIGHT HOLE

16

Rocky Ford #1
NE SW Section 27-30S-3W
Piute County, Utah

12/12/84 9350

Day-9 PBD: Surface - Prep to cut off csghd. (5-1/2" @ 9347')
Set cmt ret @ 4987'. Spot 140 sx C1"H" f/4987-4587'. LD 95 jts 2-7/8"
tbg. Spot 100 sx C1"H" 1800-1600'. Cmt parasite string w/4 bbls C1"H". LD
55 jts tbg. Spot 100 sx C1"H" from 200' to surf. SDFN. Prep to cut off
csghd.

12/13/84 9350

Day-10 PBD: Surface - FINAL REPORT - WELL P & A 12/12/84
(5-1/2" @ 9347')
Cut off csghd. Set dry hole mrkr. RR @ 0900 hrs, 12/12/84. Filled cellar,
fenced reserve pit.

TIGHT HOLE

15

Rocky Ford #1
NE SW Section 27-30S-3W
Piute County, Utah

11/28/84	9350	Day-137 TD PBD: 9258' (FC) - WO evaluation. (5-1/2" @ 9347') Fin ND BOPE. NU tbghd. RR 1800 hrs 11/26/84. WO evaluation. (Drop f/report until evaluation commences.)
<hr/>		
12/4/84	9350	Day-1 PBD: 9258' (est) - MI RU. (5-1/2" @ 9347') MI Pool Well Service 12/3/84. (Dropped f/report of 11/28/84.)
12/5/84	9350	Day-2 TD PBD: 9258' - PU tbg. (5-1/2" @ 9347') PU 6290' of 2-7/8" tbg.
12/6/84	9350	Day-3 PBD: 9238' (revised) - POH. RIH w/csg scraper to 9238' (PBD). Displace hole to 2% KCl wtr. POH w/90 stds. SDFN.
Johnson		
12/7/84	9350	Day-4 PBD: 9238' - Prep to tst. (5-1/2" @ 9347') POH w/scrpr. NU BOPs & tst same. RIH w/R-3 pkr to 6500'. Ran CBL/GR/CCL log. Acceptable bond. Fin'd RIH & set pkr @ 8971'. Swb fld dn to 2200'. Perf 9100-9135' w/2 SPF. SDFN. Prep to tst.
12/8-10	9350	Day-7 PBD: 8707' - Prep to pull 5-1/2" csg. (5-1/2" @ 9347') 9 hrs after perforating, FL @ 1500'. Swabbed well & prod 266 bbls formation water. Cl 250 ppm, Ca 480 ppm, pH 8.3. SDFN. After 15 hrs SI, FL @ 1600'. Release pkr. POH, reset pkr @ 8707'. Squeeze perms w/100 sx Cl"H". Job went on vacuum. When cmt reached perms, sqz pressure incr to 3700 psi. Reversed out 2 bbls cmt. POH w/75 stds. Remove BOPs. LD 80 jts tbg. SDFN. Overnight, Howco pumped 5000 bbls of reserve pit fluid dn 5-1/2" x 10-3/4" annulus with 0-50 psi pressure. Fin LD tbg. Weld jt of 5-1/2" csg on to 5-1/2" stub. PU 245,000#, could not recover slips. RIH w/jet cutter. Made cut @ 6794'. Wrkd pipe & heated tubghd, couldn't retrieve slips. Cut 10-3/4" csg below wlhd. Ran freepoint. Pipe stuck @ 5650', 100% free @ 5330'. Ran jet cutter & cut pipe @ 5526'. Remove 10-3/4" csghd, cut 5-1/2" csg out of slips. Weld head back on csg. SDFN.
12/11/84	9350	Day-8 PBD: 8707' - Prep to run retainer. (5-1/2" @ 9347') Layed dn 5519' 5-1/2" 17# L-80 LT & C csg. Restrung drlg line. SDFN.

TIGHT HOLE

14

Rocky Ford #1
NE SW Section 27-30S-3W
Piute County, Utah

- 11/16/84 8728 Day-125 (105') - Drlg. (8-5/8" @ 5385')
MW: 8.8# Vis: 37 Pv/Yp: 10/5 (221 gpm)
Air dn parasite string to 2523' (800 cfm)
Drl'd 7-7/8" hole to PD.
- 11/17-19 8999 Day-128 (271') - Wsh & rm w/CB. (8-5/8" @ 5385')
MW: 8.8# Vis: 38 Pv/Yp: 11/5 (220 gpm)
Air dn parasite string to 2523' (800 cfm)
Drl'd to 8743'. POH. Inspect BHA. RIH. Rnd 90' to btm. Drl'd 7-7/8" hole to PD. POH. PU CB. RIH. Wsh & rm 8935-8989'. Surveys: 8° @ 8716', 6-1/2° @ 8965'.
- 11/20/84 9067 Day-129 (68') - Circ smpls. (8-5/8" @ 5385')
MW: 8.8# Vis: 39 Pv/Yp: 11/5 (220 gpm)
Air dn parasite string to 2523' (800 cfm)
Cut Core #1, 8999-9014' & bbl jammed. POH. Cut 15', rec'd 10'. RIH w/bit. Wsh 30' to btm. Drl'd 7-7/8" hole to PD. Circ smpls @ 9035' & 9067'.
- 11/21/84 9316 Day-130 (249') - Drlg. (8-5/8" @ 5385')
MW: 8.8# Vis: 36 Pv/Yp: 10/4 (221 gpm)
Air dn parasite string to 2523' (800 cfm)
Drl'd 7-7/8" hole to PD. Circ smpls @ 9067', 9089', & 9119'.
- 11/22-26 9350 Day-135 (34') - LD 4-1/2" DP. (8-5/8" @ 5385')
MW: 8.8# Vis: 38 Pv/Yp: 9/5 (221 gpm)
Air dn parasite string to 2523' (750 cfm)
Drl'd 7-7/8" hole to PD. Circ & cond mud. Sht trip. Circ & cond mud. POH. RU Schl Ran DLL/MSFL/GR, FDT/CNL/GR/Cal, BHCS/GR, DIL/SFL/GR & Dipmeter. TIH. Circ & cond hole. TOH. Ran chk shot survey. RD Schl. TIH. Circ & cond hole. TOH to 5385' (8-5/8" csg shoe). WO 5-1/2" csg. TIH. Circ & cond hole. 5-1/2" csg arrived on loc 1900 hrs 11/25/84. Unload same. TOH & LD 4-1/2" DP.
- 11/27/84 9350 Day-136 (0') - ND BOP stack. (8-5/8" @ 5385')
Fin LD DP & BHA. RU csg crew & ran DFFS, 2 jts 5-1/2" 17# L-80 LTC csg, DFFC, 217 jts 5-1/2" 17# L-80 LTC csg. Csg lnd'd @ 9347' w/DFFC @ 9258'. Circ & cond hole. Cmt w/280 sx Howco Lite w/add foll'd by 230 sx Cl "H" cmt w/add. Pmpd 750 cfm air dn parasite string during cmt job & had full returns thruout. Plug bmpd & flts held. CIP 2230 hrs 11/26/84. Set csg slips w/175M#.

TIGHT HOLE

13

Rocky Ford #1
NE SW Section 27-30S-3W
Piute County, Utah

11/6/84	7916	Day-115 (53') - Rmg. (8-5/8" @ 5385') MW: 8.7# Vis: 37 Pv/Yp: 9/5 (220 gpm) Air dn parasite string to 2523' (800 cfm) Drl'd 7-7/8" hole to PD. POH. Chg BHA. RIH. Rnd 6900-7225'. Survey: 10° @ 7906'.
11/7/84	7952	Day-116 (36') - Drlg. (8-5/8" @ 5385') MW: 8.8# Vis: 37 Pv/Yp: 10/4 (220 gpm) Air dn parasite string to 2523' (800 cfm) Fin rmg to TD. Drl'd 7-7/8" hole to PD.
11/8/84	8036	Day-117 (84') - Drlg. (8-5/8" @ 5385') MW: 8.8# Vis: 37 Pv/Yp: 9/4 (220 gpm) Air dn parasite string to 2523' (800 cfm) Drl'd 7-7/8" hole to PD. Survey: 9-3/4° @ 7986'.
11/9/84	8089	Day-118 (53') - RIH. (8-5/8" @ 5385') MW: 8.8# Vis: 38 Pv/Yp: 11/6 (220 gpm) Air dn parasite string to 2523' (800 cfm) Drl'd 7-7/8" hole to PD w/tite conn @ 8057'. Made 5 std sht trip & plugged bit. Drop survey & POH w/wet string. Cln bit & RIH. Survey: 9-1/4° @ 8049'.
11/10-13	8429	Day-122 (340') - Drlg. (8-5/8" @ 5385') MW: 8.7# Vis: 38 Pv/Yp: 10/4 (220 gpm) Air dn parasite string to 2523' (800 cfm) RIH. Rnd tite spt @ 5912', wsh 90' to btm. Drl'd 7-7/8" hole to PD w/trip f/BHA @ 8249'. Survey: 8° @ 8233'.
11/14/84	8520	Day-123 (91') - Drlg. (8-5/8" @ 5385') MW: 8.8# Vis: 38 Pv/Yp: 10/5 (221 gpm) Air dn parasite string to 2523' (800 cfm) Drl'd 7-7/8" hole to PD. 150 BM lost to fm. Mix LCM sweep.
11/15/84	8623	Day-124 (103') - Drlg. (8-5/8" @ 5385') MW: 8.8# Vis: 37 Pv/Yp: 10/5 (221 gpm) Air dn parasite string to 2523' (800 cfm) Drl'd 7-7/8" hole to PD.

TIGHT HOLE

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Rocky Ford #1
NE SW Section 27-30S-3W
Piute County, Utah

10/25/84	6400	Day-103 (197') - Drlg. (8-5/8" @ 5385')
		MW: 8.6# Vis: 38 Pv/Yp: 9/10
		Drl'd 7-7/8" hole to PD. Survey: 3° @ 6210'.
10/26/84	6560	Day-104 (160') - Drlg. (8-5/8" @ 5385')
		MW: 8.6# Vis: 36 Pv/Yp: 9/8
		Air dn parasite string.
		Drl'd 7-7/8" hole to PD w/TFNB @ 6490'. Survey: 2° @ 6490'.
10/27-29	7089	Day-107 (529') - Drlg. (8-5/8" @ 5385')
		MW: 8.7# Vis: 38 Pv/Yp: 10/7 (250 gpm)
		Air dn parasite string to 2523' (800 cfm)
		Drl'd 7-7/8" hole to PD w/TFNB @ 6930'. Survey: 1° @ 6930'.
10/30/84	7220	Day-108 (131') - Drlg. (8-5/8" @ 5385')
		MW: 8.8# Vis: 37 Pv/Yp: 9/4 (250 gpm)
		Air dn parasite string to 2523' (800 cfm)
		Drl'd 7-7/8" hole to PD.
10/31/84	7370	Day-109 (150') - Drlg ahead. (8-5/8" @ 5385')
		MW: 8.8# Vis: 36 Pv/Yp: 9/5 (250 gpm)
		Air dn parasite string to 2523' (800 cfm)
		Drl'd 7-7/8" hole to PD. Circ smpls @ 7285', 7300' & 7310'.
11/1/84	7427	Day-110 (57') - Drlg. (8-5/8" @ 5385')
		MW: 8.8# Vis: 38 Pv/Yp: 10/5 (250 gpm)
		Air dn parasite string to 2523' (800 cfm)
		Drl'd to 7400'. POH. Inspect BHA. RIH. Rnd 100' to btm. Drl'd 7-7/8" hole to PD.
11/2/84	7540	Day-111 (113') - Drlg. (8-5/8" @ 5385')
		MW: 8.7# Vis: 38 Pv/Yp: 9/5 (250 gpm)
		Air dn parasite string to 2523' (800 cfm)
		Drl'd 7-7/8" hole to PD. Had to wrk tite hole & stuck pipe once. 80 BM lost. Survey: 1° @ 7352'.
11/3-5	7863	Day-114 (323') - Drlg. (8-5/8" @ 5385')
		MW: 8.7# Vis: 36 Pv/Yp: 9/4 (220 gpm)
		Air dn parasite string to 2523' (800 cfm)
		Drl'd 7-7/8" hole to PD w/TFNB @ 7845'. Surveys: 6° @ 7500', 8-1/2° @ 7820'.

TIGHT HOLE

Rocky Ford #1
NE SW Section 27-30S-3W
Piute County, Utah

10/13-15	5385	Day-93 (13') - Wshg & rmg @ 5315'. MW: 8.7# Vis: 160 Pv/Yp: 26/32 Wsh & rm to 5372'. Drld 9-1/2" hole to 5385'. POH to 4895'. RIH to 5385'. No fill. POH. WO csg. Ran 15 jts 8-5/8" lnr. Tagged up @ 5282'. Wrk to 5285'. POH, LD lnr. RIH. Rnd 5269-5385'. POH. RU rurs. RIH. Wsh & rm 4995-5315' w/tite spts 5260-5285', 5288', 5290' & 5297'. (10-3/4" @ 4993')
10/16-17	5385	Day-95 (0') - RIH w/bit. MW: 8.7# Vis: 52 Pv/Yp: 16/17 Wsh & rm w/ 9-1/2" bit 5315-5385'. Sht trip - no fill. POH. PU & RIH w/ 8-5/8" 32# S-80 AB-FL4S lnr. RIH to 4950' & circ. RIH & set lnr w/shoe @ 5385' & top of hgr @ 4766'. Cmt w/175 sx Cl "H". POH w/setting tools & WDC. Tst BOPs. Inspect BHA. RIH w/ 9-1/2" bit. (8-5/8" @ 5385')
10/18/84	5385	Day-96 (0') - CO liner. MW: 8.8# Vis: 58 Pv/Yp: 15/17 RIH w/ 9-1/2" bit & tag cmt @ 4686'. Drld cmt to 4765'. POH & PU 7-7/8" bit. RIH to 5272'. Drlg out cmt in 8-5/8" lnr. (8-5/8" @ 5385')
10/19/84	5385	Day-97 (0') - TOH w/magnet. MW: 8.6# Vis: 42 Pv/Yp: 12/10 Drld cmt to 5384'. Press tst csg to 1500 psi - OK. Drld on GS. TOH, left 3 cones. TIH w/magnet & JS & circ'd. TOH, rec'd 1-1/2 cones & aluminum. RIH w/magnet & JS & circ'd on jk. TOH. (8-5/8" @ 5385')
10/20-22	5720	Day-100 (335') - Drlg. MW: 8.7# Vis: 38 Pv/Yp: 10/11 POH w/magnet. Rec'd 4 lrg pcs of steel. RIH w/bit & JS. Drld 5385-90'. POH. Rec'd some aluminum. RIH & wsh on jk. POH, rec'd pcs of cone. RIH. Drld 7-7/8" hole to 5639'. Lost returns. Pull into csg shoe. Mix LCM. POH. Instl rotating hd. RIH. Tag fill @ 5596'. Drld 7-7/8" hole to PD w/mud & air dn parasite string. Survey: 1-1/2° @ 5591'. (8-5/8" @ 5385')
10/23/84	6045	Day-101 (325') - Drlg. MW: 8.9# Vis: 36 Pv/Yp: 9/10 Drld 7-7/8" hole to PD w/lost returns @ 5942'. Mix LCM & regained returns. (8-5/8" @ 5385')
10/24/84	6203	Day-102 (158') - Drlg. MW: 8.6# Vis: 37 Pv/Yp: 9/12 Drld 7-7/8" hole to PD w/TFNB @ 6168'. Survey: 2-1/2° @ 6168'. (8-5/8" @ 5385')

TIGHT HOLE

10

Rocky Ford #1
NE SW Section 27-30S-3W
Piute County, Utah

- 10/4/84 5372 Day-82 (0') - LD wsh pipe. (10-3/4" @ 4993')
MW: 8.7# Vis: 140 Pv/Yp: 32/38
Wsh & rm 5135-5140' w/torque & drag when PU. POH. RIH w/ 8-1/8" wsh pipe, catcher bushing & mill. Tag up @ 5137', wsh thru rocks to 5141'. POH. Recover 6 lrg rocks.
- 10/5/84 5372 Day-83 (0') - RIH w/ 8-1/2" bit. (10-3/4" @ 4993')
MW: 8.7# Vis: 145 Pv/Yp: 31/36
PU 8-1/2" mill & RIH. Wsh & mill 5138-5144'. POH. PU 8-1/8" wsh pipe w/Globe bskt & RIH. Tag up @ 5139'. Wsh over rocks 5139-5144'. POH & LD wsh pipe. Rec'd 3 lrg rocks & 6 med rocks. RIH w/ 8-1/2" bit.
- 10/6-8 5372 Day-86 (0') - Drlg cmt @ 5148'. (10-3/4" @ 4993')
MW: 8.7# Vis: 130 Pv/Yp: 27/32
RIH w/ 8-1/2" bit. Wsh & rm 5144-5152'. Set 225 sx Cl "H". Pull 8 stds. Sqz 15 bbls @ 850#. POH. WOC. RIH to 4368'. Displ'd hole w/wtr. Tag cmt 4937'. Drl'd cmt 4937-5115'. POH. RIH w/mill. Displ hole w/mud. Mill f/5115-5142'. POH. Chg mills. RIH. Hit tite spt @ 4488'. POH. Mill over guage 1/16". RIH w/bit. Drl'd cmt 5142-5148'.
- 10/9/84 5372 Day-87 (0') - Wshg & rmg. (10-3/4" @ 4993')
MW: 8.7# Vis: 155 Pv/Yp: 28/33
Drl'd cmt w/ 9-1/2" bit. Wsh & rm 5148-5202' w/ 9-1/2" bit.
- 10/10/84 5372 Day-88 (0') - Wshg & rmg @ 5255'. (10-3/4" @ 4993')
MW: 8.7# Vis: 155 Pv/Yp: 31/40
Wsh & rm 5202-5213'. Drop survey & POH. Survey misrun. RIH w/ 9-1/2" bit. Wsh & rm 5213-5255'.
- 10/11/84 5372 Day-89 (0') - Wshg & rmg. (10-3/4" @ 4993')
MW: 8.7# Vis: 147 Pv/Yp: 33/42
Wsh & rm 5255-5278'. POH. chg bit. RIH. Wsh & rm 5278-5300'. Survey: 1° @ 5278'.
- 10/12/84 5372 Day-90 (0') - Wshg & rmg @ 5370'. (10-3/4" @ 4993')
MW: 8.8# Vis: 149 Pv/Yp: 35/44
Wsh & rm 5300-5370'.

TIGHT HOLE

9

Rocky Ford #1
NE SW Section 27-30S-3W
Piute County, Utah

- 9/26/84 5372 Day-74 (0') - RIH w/fshg tools. (10-3/4" @ 4993')
MW: 8.7# Vis: 70 Pv/Yp: 20/24
Wsh & rm to 4969'. POH w/wsh pipe. Chg shoe & RIH w/wsh pipe. Wrk over fsh @ 4970'. Wsh over 4970-5064'. Spt hi-vis mud on btm. POH. RIH w/screw-in sub.
- 9/27/84 5372 Day-75 (0') - Circ & cond mud. (10-3/4" @ 4993')
MW: 8.6# Vis: 50 Pv/Yp: 16/13
FIH. Screw into fsh. Jarred fsh free. POH. Rec'd all fsh. LD fshg tools. PU bit & BHA & RIH. Circ & cond mud.
- 9/28/84 5372 Day-76 (0') - WOC. (10-3/4" @ 4993')
MW: 8.6# Vis: 175 Pv/Yp: 28/35
Circ & cond mud. Tag fill @ 5147'. Wsh & rm 5147-5153'. POH to 4928' & wait 4-1/2 hrs. RIH & tag up @ 5135'. POH. Run cal log. RIH OE. WOC.
- 9/29-10/1 5372 Day-79 (0') - POH. (10-3/4" @ 4993')
MW: 8.7# Vis: 150 Pv/Yp: 34/40
POH. PU BHA w/jet sub & RIH. Wsh & rm 4927-5087'. Pipe torqued up & press jumped to 3000#. Stuck pipe. Jarred free & POH to 4992'. Wrkd pipe f/4992-4927' & POH. Chg bit to 7-7/8" & PU new jet sub. RIH. Wsh & rm 4960-5024'. POH into csg. RIH. Wsh & rm 5094-5145'. POH. Ran cal log 5138-4993'. RIH w/ 7-7/8" bit & tag up @ 5139'. RIH w/catcher bushing & wsh pipe. Tag fill @ 5134'. Rnd in fill 5134-5140'. POH.
- 10/2/84 5372 Day-80 (0') - WOC. (10-3/4" @ 4993')
MW: 8.7# Vis: 110 Pv/Yp: 32/37
POH w/wsh pipe & catcher bushing. Rec'd 3 lrg pcs rock. RIH OE to 4989'. WO Howco. RIH to 5135'. Set a 225 sx plug of Cl "H". POH 8 stds & rev out. Close rams & sqz 20 bbls. SIDP press 875#. POH. RIH w/bit to 4000'. WOC.
- 10/3/84 5372 Day-81 (0') - Wshg & rmg. (10-3/4" @ 4993')
MW: 8.4# Vis: 88 Pv/Yp: 28/28
WOC. RIH. Tag cmt @ 5078'. POH to 4965' & displ hole to wtr. RIH, tag cmt @ 5078' to 5098' - vy soft. POH to 4965' & WOC. RIH. Drl'd cmt w/ 9-1/2" bit 5098-5135'. Displ hole to mud. Wsh & rm in rubble @ 5135'. Rnd to 5140' twice w/hi torque & drag. Hole fell in to 5135' ea time.

TIGHT HOLE

Rocky Ford #1
NE SW Section 27-30S-3W
Piute County, Utah

- 9/15-17 5372 Day-65 (0') - Wash & rm. (10-3/4" @ 4993')
MW: 8.6# Vis: 65 Pv/Yp: 18/28
Wash & rm. Sht trip. Resumed rmg. Stuck pipe & jarred free. DP pressured up. Pull 3 stds. Circ OK. RIH. Tag up @ 5049'. POH. LD SS & 12 DCs. RIH. Wash & rmd 5040-5150'. Jar stuck pipe. Resume rmg. DP pressured up. POH to csg, unplug jet. POH. Remove nozzels. RIH. Tag fill 5020'. Wash & rm. Jar stuck pipe @ 5144'. Wash & rm. Stuck again @ 5144' & jarred same free. Wash & rm 5144-5165'. Lost hole back to 5155'.
- 9/18/84 5372 Day-66 (0') - RIH w/OE DP. (10-3/4" @ 4993')
MW: 8.5# Vis: 66 Pv/Yp: 19/28
Wash & rm to 5165'. Sht trip, tag fill @ 5054'. 4 add'l sht trips, tag fill @ 5052' ea time. POH. RIH OE & WO cmt.
- 9/19/84 5372 Day-67 (0') - WOC. (10-3/4" @ 4993')
MW: 8.5# Vis: 66 Pv/Yp: 19/28
RIH w/OE DP to 5052'. Spt 500 sx plug Cl "H". CIP 1000 hrs 9/18/84. POH 15 stds, rev out. Press up to 250# & hold f/3 hrs. POH. WOC. RIH to 4960', no cmt. POH to 4400' & circ out w/tr cmt. RIH to 4998', tag soft cmt. Wash to 5005', held 10M# wt. POH to 4960'. Circ & WOC.
- 9/20/84 5372 Day-68 (0') - WOC (10-3/4" @ 4993')
Wtr
WOC. Drld cmt 5005-5020'. POH. RIH w/OE DP to 5020'. Set 200 sx plug of Cl "H" + 2% CaCl₂. Pull 10 stds & rev out. Press csg to 250# & held f/ 2-1/2 hrs. POH. RIH w/bit to 4102'. Circ & WOC.
- 9/21/84 5372 Day-69 (0') - Wash & rm. (10-3/4" @ 4993')
MW: 8.6# Vis: 68 Pv/Yp: 22/26
WOC. Tag cmt @ 4570'. Drld cmt w/ 9-1/2" bit 4570-5054'. Displ'd hole to mud. Wash & rm 5054-5086'.
- 9/22-24 5372 Day-72 (0') - Fshg. (10-3/4" @ 4993')
MW: 8.6# Vis: 69 Pv/Yp: 17/24
Wash & rm to 5240'. Stuck pipe w/bit @ 5193'. Jar on same. Run free pt. BO @ top of jars @ 4971'. PU 5'. Circ @ top of fsh w/lrge amt of cuttings.
- 9/25/84 5372 Day-73 (0') - Wash & rm. (10-3/4" @ 4993')
MW: 8.7# Vis: 67 Pv/Yp: 17/20
Circ @ top of fsh @ 4971'. POH. Rec'd three (3) 6-1/2" DCs. PU 3 jts washover pipe. RU McCull. Attempt to run csg inspection log - tools wouldn't wrk. RIH w/wsh pipe, tag fill @ 4873'. Wash & rmg @ 4879'.

TIGHT HOLE

7

Rocky Ford #1
NE SW Section 27-30S-3W
Piute County, Utah

- 9/7/84 5372 Day-55 (0') - Cmt 10-3/4" (10-3/4" @ 5015')
Wtr/Foam/Air
RIH w/9-1/2" bit to 1000'. POH. Resume rmg 10-3/4", 55.5#, L-80 & 65.7#, SS-95, ST&C. Set @ 5015'. Cmt thru shoe w/400 sx Howco Lite + LCM & 1000 sx "H" + LCM & displc w/o bmg plug. No returns. Displc parasite string. Opn DV tool. Circ thru DV while WOC. Cmt thru DV w/1300 sx lite + LCM & 100 sx "H" w/add. Drop plug & displc. Close DV tool. No returns. CIP @ 0540 hrs, 9/7/84.
- 9/8-10 5372 Day-58 (0') - Drlg on stage clr. (10-3/4" @ 5015')
Wtr
With 1" @ 300' in 16" x 10-3/4", pmp LCM pill. Pmp 75 sx Cl "A" + 2% CaCl₂. WOC. RIH to 325'. Pmp 225 sx "A" + 2% CaCl₂, no returns. WOC. Run 1" to 325', no cmt. WOC. Rev thru parasite string, OK. Cmt w/200 sx Cl "A" + 3% CaCl₂, gd returns. Cmt to surf. WOC. ND 16" BOP. Cut off 10-3/4" & weld on csghd. No 13-5/8" BOPs. RIH w/ 9-1/2" bit & drld on DV clr.
- 9/11/84 5372 Day-59 (0') - WO RTTS pkr. (10-3/4" @ 4993')
Wtr
Drl'd DV @ 2618'. RIH to 4792'. Drl'd cmt to 4992'. POH. Run CBL. RIH 8 stds DP, POH & LD same. RIH to 4950'. Tst csg to 1400# - bled to 900# in 15 min. WO RTTS to locate leak.
- 9/12/84 5372 Day-60 (0') - RU to cmt 10-3/4" shoe. (10-3/4" @ 4993')
Wtr
POH. WO RTTS (2 hrs). RIH w/RTTS, set @ 2965'. Pmp 15 BW dn DP 4 BPM @ 1000#, SIP 350# bleeding to 0# in 5 min. Tst backside to 1500# f/15 min - OK. RIH, set pkr @ 4862'. Tst csg to 1500# f/15 min - OK. RU to cmt 10-3/4" shoe.
- 9/13/84 5372 Day-61 (0') - RD Schl. (10-3/4" @ 4993')
Wtr
Set pkr @ 4862'. Cmt 10-3/4" shoe w/200 sx "H" w/2% CaCl₂ (38.5 bbls). Displ w/65 bbls H₂O. Press up to 2000#, held 22 bbl cmt in fm, 11 bbls in csg & 5 bbls in DP. Rev out 5 bbls cmt. Reset pkr, press up to 2000#. Held 15 min, rel'd pkr & POH. TIH w/bit to 4475'. WOC 5 hrs. Cont TIH, tag cmt @ 4862'. Drl'd cmt to 4975'. Circ & cond hole. TOH w/bit. RU Schl & ran CBL f/4966-3900'. RD Schl.
- 9/14/84 5372 Day-62 (0') - Wash & rm. (10-3/4" @ 4993')
MW: 8.4# Vis: 40 Pv/Yp: 8/10
RD Schl. RIH w/ 9-1/2" bit. Drl'd cmt 4975-4996'. Wash & rm 4996-5049'. Got stuck 5 times. Wrkd pipe & jarred free. Wash & rm 5049-5081'.

TIGHT HOLE

Rocky Ford #1
NE SW Section 27-30S-3W
Piute County, Utah

- 8/30 5372 Day-47 (0') - Condition hole. (16" @ 1669')
Wtr/Foam/Air
Brk circ @ 5040'. Wash & rm 5049-5204', 300 gpm wtr, 700 scfm air w/jet sub @ 1200' - good returns, no cuttings. 12 std shrt trip, remove jet sub. Tag fill 5045'. Wash & ream 5045-5372' w/600 gpm wtr, 1600 scfm air & 12 BPH wtr w/soap. Pmp 11-90 bbl vic sweeps w/god returns & fair amt of cuttings. Circ & cond.
- 8/31 5372 Day-48 (0') - Condition hole & prep to case (16" @ 1669')
Wtr/Foam/Air
Circ & cond hole. SPot 80 bbl gel pill on btm. shrt trip, fill @ 5316'. Wash & rm 5316-5372'. Circ & cond w/hi vis sweeps. POH, LD shock sub & DCs. RU to run csg. Lack csg tools due to accident. RIH w/DP to cond hole.
Johnson
- 9/1-4 5372 Day-52 (0') - Inspect BHA (16" @ 1669')
Wtr/Foam/Air
RIH, brk circ @ 3500' - good returns. RIH, tag fill @ 5240'. Circ w/600 gpm wtr & 1600 cfm - no returns. POH 7 stds, brk circ, good returns. RIH, tag fill @ 5177'. Brk circ w/good returns. Wash dwn 3', circ 600 gpm wtr & 1600 cfm air @ 500 psi, press incr'd to 2100# & stuck pipe. Wrk stuck pipe & pmp vis sweeps @ 2200# - would not bleed below 1600# w/pmp off. Wrkd pipe out 25', press drop to 1400#. Try to brk circ w/air, ran out of wtr in res pit. Brk circ f/15 min then lost circ. Cont to wrk pipe & pmp vis sweeps. WO free pt eqpt. RU & run free pt, stuck @ 4864' (top of DCs). Backed off @ 4864'. POH. RIH w/fshg tools, engage fsh, drove fsh dwn 2', commenced jarring. Fsh came loose. POH. Dropped bit, BS, DC's & fshg tools in hole. RIH & recovr fsh. Magnaflux BHA.
- 9/5 5372 Day-53 (0') - Running 10-3/4" csg (16" @ 1669')
Wtr/Foam/Air
LD BHAs. RU csg crew & ran 52 jts csg.
- 9/6/84 5372 Day-54 (0') - WO 9-1/2" bit, spider, & slips (16" @ 1669')
Wtr/Foam/Air
Ran 101 jts 10-3/4" csg to 4526'. Csg collapsed in slips. Pulled 23 jts - found 4 collapsed & 18 jts w/bad threads. Cln & inspect csg on racks. WO bit, spider, & slips to run 9-1/2" bit to check gauge.

TIGHT HOLE

5

Rocky Ford #1
NE SW Section 27-30S-3W
Piute County, Utah

8/21/84 Day 38

TD: 4206' (296') - Drlg. (16" @ 1669')
Water & air
Drld 14-3/4" hole to PD. Drag on connection @ 4118'. Incr'd foam & corr'd problem.

8/22/84 4513 Day-39 (307') - Drlg. (16" @ 1669')
Water & air
Drld 14-3/4" hole to PD. Inj 10 bbl wtr w/4 bbl soap/hr.

8/23/84 4771 Day-40 (258') - Drlg. (16" @ 1669')
Water/foam/air
Drld 14-3/4" hole to PD.

8/24/84 4771 Day-41 (0') - Wshg to btm. (16" @ 1669')
Water/foam/air
POH to DCs, inspect BHA. RIH w/BHA, inspect kelly & svr sub. Set rotating hd bwl, drop bushing pullers in hole. POH w/DCs very slowly w/bit in csghd, retract lockscrews to wear bushing & opnd lwr ram doors. Rec'd bushing pullers. Reset wear bushing & closed ram doors. RIH. Wsh 120' to btm.

8/25-27 5372 Day-44 (601') - Attempt to brk circ @ 4200'. (16" @ 1669')
Wtr/Foam/Air
Wshd 120' to btm & drld (inj 10 BW w/3 gal soap/hr). Survey. Circ up smpls @ 5290' (drlg brk f/5269-5288'). Cont drlg w/mist. TOH f/B#8 @ 5372'. TIH to 3500'. Attempt to brk circ, no returns. Cont TIH, tag fill @ 5140'. Survey. Attempt to brk circ, no returns. Surveys: 1/4° @ 4759', 3/4° @ 5140'.

8/28 5372 Day-45 (0') - Condition hole. (16" @ 1669')
Wtr/Foam/Air
Unload hole @ 4180'. RIH 5 stds, brk circ @ 4645' w/good returns. RIH 5 stds, brk circ. Ream 5037-5174' w/good returns. After conn, pipe back lashed & stripped out rot table locks. POH checking conn - 7 loose. Rebuilt rot table locks. RIH & ream 5070-5101' - lost returns.

8/29 5372 Day 46 (0') - Condition hole. (16" @ 1669')
Wtr/Foam/Air
Wsh & ream 5039-5204', 600 gpm, 3000 scfm - good returns. POH. Chk FL @ 2025', wait to stab. Recheck FL @ 950'. RIH to 2994' w/jet sub @ 1200', brk circ. RIH & tag 3330 of fill. Brk circ w/300 gpm & 700 scfm. No returns. Chg out air booster 3-1/2 hrs.

TIGHT HOLE

4

Rocky Ford #1
NE SW Section 27-30S-3W
Piute County, Utah

- 8/11-13 3390 Day-30 (570') - Drlg. (16" @ 1669')
MW: 8.6# Vis: 40 Pv/Yp: 9/10
Drl'd 14-3/4" hole to PD. Lost 3520 BM in 3 days. Surveys: 1/8° @ 2874', 2° @ 6199', 1/4° @ 3264'.
- 8/14/84 3582 Day-31 (192') - Pmpg LCM pill. (16" @ 1669')
MW: 8.6# Vis: 38 Pv/Yp: 8/9
Drl'd 14-3/4" hole to 3457', lost circ. Mix LCM pill, regained full returns (lost 500 BM total). Drl'd to PD, lost returns. Mix 200 bbl LCM, no returns. In past 24 hrs, lost 1100 BM. Survey: 1/4° @ 3479'.
- 8/15/84 3582 Day-32 (0') - WOC. (16" @ 1669')
MW: 8.5# Vis: 37 Pv/Yp: 8/10
Lost circ @ 3582'. Mix 3 LCM pills w/no success. 750 BM lost @ 3582'. POH. RIH OE to 3526'. Set 200 sx plug Thixotropic cmt. POH. RIH to 1600' w/bit. WOC. 2400-0600 hrs pmp 200 BM w/no returns.
- 8/16/84 3648 Day-33 (66') - POH. (16" @ 1669')
Aerated Mud
With bit @ 1690' pmp 200 BM w/30% LCM - no returns. RIH, tag cmt 3436'. Mix mud & LCM, got returns. Drl'd to 3595' w/o returns, lost 400 BM. Mix mud & LCM. POH, PU jet sub. RIH. Drl'd 14-3/4" hole w/aerated mud to PD. POH to set cmt plug.
- 8/17 Day 34 TD: 3715' (67') - Drlg. (16" @ 1669')
Aerated Mud
POH. Tag FL @ 1180' w/WL. RIH OE to 3582'. Spt plug - 200 sx Thixotropic w/LCM. WOC. RIH, jet sub @ 1400', tag up @ 3528'. Drl'd cmt to TD 3648'. Drl'd 14-3/4" hole. Lost circ. Incr air, regained circ. Lost 515 BM/6 hrs since resuming drlg.
- 8/18-20 Day 37 TD: 3910' (195') - Drlg. (16" @ 1669')
Air-Foam-Water
Drl'd 14-3/4" hole to 3843'. Lost ret - 500 BM. POH. Check FL - 1450'. RIH OE to 3800'. Set 200 sx plug of thixotropic cmt + LCM + CaCl₂. POH & WOC. RIH w/B#5 & jet sub. Tag cmt @ 3588'. Drl cmt f/3548-3640', pmp LCM pill, no returns. Sht trip, LD jet sub. Drl'd cmt f/3640-3812', no returns, w/gelled wtr & air. POH to 1669'. RU foam equpt, RIH to 2030', brk circ w/foam. RIH to 3050', brk circ. RIH to 3790', could'nt brk circ. POH to 2862', brk circ. RIH to 3326', brk circ. RIH to 3731', brk circ w/wtr, foam & air. Drl'd 14-3/4" hole to PD. Survey: 1-1/2° @ 3792'.

TIGHT HOLE

3

Rocky Ford #1
NE SW Section 27-30S-3W
Piute County, Utah

- 8/2/84 1690 Day-19 (282' rmg) - Rmg 14-3/4" hole to 22" @ 1320'. (24" @ 102')
MW: 8.7# Vis: 38 Pv/Yp: 10/9
Opng hole prior to rmg 16" csg. Lost approx 1400 BM in last 24 hrs again.
- 8/3/84 1690 Day-20 (360' rmg) - Rmg 14-3/4" hole to 22" @ 1680'. (24" @ 102')
MW: 8.8# Vis: 37 Pv/Yp: 11/9
Opng hole prior to rmg 16" csg. Lost approx 1000 BM in last 24 hrs.
- 8/4-6 1690 Day-23 (0' rmg) - Drlg cmt in 16" csg. (16" @ 1669')
Drlg w/wtr
Opn 14-3/4" hole to 22' to 1690'. Circ sweep & cond hole. Make 12 std sht trip. Circ & cond hole. TOH. RU csg crew. Ran 43 jts 16", 75#, K-55, STC csg. Landed csg @ 1669' KB. Circ csg. PU stab-in stinger on 4-1/2" DP & TIH f/inner string cmt job. RU Hallib & cmtd csg w/1410 sx Howco Lite w/add, foll'd by 1075 sx Cl "A" cmt w/add. Lost cmt returns w/100 sx tail cmt left to pmp. Completed job. CIP @ 0230 hrs 8/4/84. TOH w/ 4-1/2" DP. WOC. TOC @ 330'. Run 320" of 1" pipe dn 16" x 22" ann. Cmt backside w/200 sx Cl "A" cmt w/add. POH w/1", WOC. Run 100' of 1" pipe dn ann. Cmt ann to surf w/100 sx Cl "A" cmt w/add. WOC. Cmt csg. ND diverter. Weld on csghd. NU & press tst BOPE. TIH. Drl'd FC & 60' cmt. Press tst csg to 1000 psi. Cont drlg cmt in csg. Survey: 1/8° @ 1690'.
- 8/7/84 1906 Day-24 (216') - Drlg. (16" @ 1669')
MW: 8.5# Vis: 38 Pv/Yp: 9/10
Drl'd cmt & GS. Drl'd 14-3/4" hole to PD w/ 11-1/2 hrs mixing mud because of lost returns. Lost 1550 BM.
- 8/8/84 2445 Day-25 (339') - Drlg. (16" @ 1669')
MW: 8.5# Vis: 47 Pv/Yp: 9/10
Drl'd & surveyed 14-3/4" hole to PD. Lost 1500 BM due to lost returns. Survey: 3/4° @ 2008' & 2164'.
- 8/9/84 2550 Day-26 (305') - Drlg. (16" @ 1669')
MW: 8.5# Vis: 37 Pv/Yp: 9/9
Drl'd & surveyed 14-3/4" hole to PD. Lost 1300 BM. Survey: 3/4° @ 2350' & 2504'.
- 8/10/84 2820 Day-27 (270') - Drlg. (16" @ 1669')
MW: 8.6# Vis: 35 Pv/Yp: 10/7
Drlg 14-3/4" hole to PD. Lost 1200 BM. Survey: 1/2° @ 2657'.

TIGHT HOLE

2

Rocky Ford #1
NE SW Section 27-30S-3W
Piute County, Utah

- 7/21-23 943 Day-9 (504') - Drlg w/full returns. (24" @ 102')
MW: 8.5# Vis: 38 Pv/Yp: 10/8
Filled hole & TIH w/bit. Tagged TOC @ 209'. Drl'd cmt w/full returns & drl'd ahead to PD. Lost circ @ 743', 759' & 786'. Drl'd blind f/786-809' & gained circ.
- 7/24/84 1280 Day-10 (337') - Drlg. (24" @ 102')
MW: 8.5# Vis: 34 Pv/Yp: 8/6
Drl'd 14-3/4" hole to PD w/partial loss of mud @ 1186'. Surveys: 1/2° @ 1051' & 1186'.
- 7/25/84 1359 Day-11 (79') - WOC. (24" @ 102')
MW: 8.5# Vis: 34 Pv/Yp: 8/6
Drl'd 14-3/4" hole to PD. Lost full returns @ TD. Cln mud pits. RU gas buster & rot hd. TIH w/OE DP. Howco sptd 100 sx Cl "A" w/add @ 1326' & 100 sx Cl "A" w/add @ 1130'. Survey: 3/4° @ 1298'.
- 7/26/84 1434 Day-12 (77') - Drlg. (24" @ 102')
MW: 8.6# Vis: 32 Pv/Yp: 6/6 (aerated)
WOC. TIH. Tag cmt @ 1050'. Brk circ w/mud + 330 cfm air. Drl'd cmt 1050-1320'. Drl'd ahead to PD.
- 7/27/84 1617 Day-13 (183') - Drlg. (24" @ 102')
MW: 8.5# Vis: 39 Pv/Yp: 8/10 (non-aerated)
Lost full returns @ 1434'. Pull 7 stds. Re-bld mud vol. TIH. Pmp 150 BM & regained full returns. Drl'd & surveyed to PD. Survey: 1° @ 1485'.
- 7/28-30 1690 Day-16 (73') - Rng 14-3/4" hole to 22" @ 585'. (24" @ 102')
MW: 8.8# Vis: 37 Pv/Yp: 9/8
Drl'd 14-3/4" hole to PD. POH. PU 22" HO & new BHA. TIH to 102'. Strt opng 14-3/4" hole to 22" to set 16" csg. Mud loss 20 BPH. Surveys: 3/4° @ 1610', 1° @ 1670'.
- 7/31/84 1690 Day-17 (0') - Rng 14-3/4" hole to 22" @ 843'. (24" @ 102')
MW: 8.8# Vis: 40 Pv/Yp: 10/12
Opng hole prior to rng 16" csg. Lossing 75 BMPH.
- 8/1/84 1690 Day-18 (195' rng) - Rng 14-3/4" hole to 22" @ 1038'. (24" @ 102')
MW: 8.7# Vis: 38 Pv/Yp: 10/9
Opng hole prior to rng 16" csg. Lost approx 1400 BM in last 24 hrs.

TIGHT HOLE

Rocky Ford #1
NE SW Section 27-30S-3W
Piute County, Utah

7/10/84		All loads on loc. Commence RU.
7/11/84		Day -2. Cont RU.
7/12/84		Day -3. (0') - Cont RU. Anticipate spud 7/13/84.
7/13/84	0	Day -4. (0') - Cont RU. Anticipate spud PM 7/13/84.
7/14-16	102	Day-2 (102') - Circ & cond hole f/conductor. MW: 9.0# Vis: 40 Spud Mud SPUD well 1200 hrs 7/14/84. KB = 22'. Drld 17-1/2" hole to PD & opnd to 32".
7/17/84	102	Day-3 (0') - NU Diverter. (24" @ 102') MW: NA Vis: NA Pv/Yp: NA Circ & cond hole. LD DCs & HO. Run 3 jts of 24" 94" welded jt csg. Csg landed @ 102'. Cmt csg w/360 sx Cl "A" cmt w/add. Gd returns w/17 bbl cmt circ to pit. WOC. Cut off csg & wld on fabricated head. NU diverter.
7/18/84	225	Day-4 (123') - Drlg. (24" @ 102') MW: 8.5# Vis: 32 Pv/Yp: 5/6 NU Diverter, CO conductor & drld 14-3/4" hole to PD.
7/19/84	393	Day-5 (168') - Mix LCM pill. (24" @ 102') MW: 8.6# Vis: 36 Pv/Yp: 7/9 Drld 14-3/4" hole to 364'. Lost 150 BM. Mix & spt 4 LCM pills (350 bbls total) & regained circ. Drld to PD. Lost full returns. Mix & spt LCM pill (150 bbls) w/o returns. Survey: 1/4° @ 220'.
7/20/84	439	Day-6 (46') - WOC in OH plug. (24" @ 102') MW: 8.6# Vis: 42 Pv/Yp: 11/10 Mix & spt three (3) 100 bbl 30% LCM pills. Drld 14-3/4" hole to PD w/partial to no returns. Mix mud & TOH. PU 11 jts DP & RIH OE to 335'. RU Howco & spt 125 sx Cl "G" cmt w/add in OH w/FL @ 210'. WOC & pmp 70 bbl mud w/o returns. TIH & tag soft cmt @ 285'. Mix & spt 75 sx Cl "A" cmt w/add. WOC.

DRILLING PLAN

Attach to APD form 9-331-C
ARCO Oil and Gas Company
Well: Rocky Ford #1
2030' FSL & 1645' FWL
Section 27-T30S-R3W
Piute County, Utah

1. Estimated Tops of Geological Markers:

Volcanics - surf	Shinarump - 9644'
Cretaceous - 1250'	Moenkopi - 9787'
Carmel - 6534'	Sinbad - 11087'
Navajo - 7135'	Kaibab - 11259'
Chinle - 9400'	Toroweap - 11459' ✓

2. Estimated Tops of Possible Water, Oil, Gas or Minerals:

Volcanics - surf (wtr)	Kaibab - 11259' (wtr/gas/oil)
Dakota - 2914' (wtr/gas/oil)	Toroweap - 11459' (wtr/gas/oil)
Navajo - 7135' (wtr/gas/oil)	
Shinarump - 9644' (wtr/gas/oil)	
Moenkopi - 9787' (wtr/gas/oil)	
Sinbad - 11087' (wtr/gas/oil)	

3. Minimum Specifications for Pressure Control

Exhibits A-1, A-2 and A-3 are schematic diagrams of the BOP equipment for each hole section as follows:

<u>Exhibit</u>	<u>Interval</u>	<u>Pressure Control Equipment</u>
A-1	150-1250'	29-1/2" hydraulic annular preventer tested to 100 psi with two 4" Blooey lines equipped with automati-cally controlled hydraulic valves for use as a flow diverter
A-2	1250-7100'	16" 3000 psi double ram, 2000 psi annular
A-3	7100-11700'	11" 5000 psi double ram, 5000 psi annular

Shown in Exhibits A-4 and A-5 are the schematic diagram of the choke manifold and an outline of the BOP specifications, respectively.

All ram type preventers and related control equipment will be hydraulically tested at nipple up, after any use under pressure, and every 30 days, to full working pressure or at 70% of the minimum internal yield pressure of

the casing, whichever is less. The annular preventer will be tested to 60% of full working pressure. In addition, all pipe rams will be operationally checked each 24-hour period as will blind rams and annular preventer each time pipe is pulled out of the hole.

All pressure tests will be reported on the official daily drilling report form.

Accessories to BOP equipment will include a kelly cock, floor safety valve, and a choke manifold with pressure rating equivalent to the BOP stack.

4. Proposed Casing Program:

<u>Casing</u>	<u>Hole Size</u>	<u>Interval</u>	<u>Section Length</u>	<u>Size OD</u>	<u>Weight Grade and Joint</u>	<u>New Used</u>
Conductor	36"	0 - 150'	150'	30"	X-52, PE	New
Surface	26"	0 - 1250'	1250'	16"	65#/ft H-40 STC	New
Protective	14-3/4"	0 - 6350'	6350'	10-3/4"	55.50#/ft L-80 STC	New
	14-3/4"	6350- 7100'	750'	10-3/4"	65.70#/ft SS-95 STC	New
Production	9-1/2"	0 - 11700'	11700'	5-1/2"	17#/ft L-80 LTC	New

Cement Program:

Cement volumes to be based on caliper logs. Actual slurries and additives to be designed for existing conditions.

Conductor	30"	Grouted to surface using 1" annulus grout lines
Surface	16"	Cmt to surface using innerstring method
Protective	10-3/4"	2-stage cement job intended to cover all permeable zones
Production	5-1/2"	Cmt to cover all producible zones

Note: All casing strings shall be tested to the maximum possible anticipated shut-in pressure, not to exceed 70% rated internal yield pressure or to be less than 1000 psi. (This does not include conductor pipe).

District	County or Parish	State
Rocky Mountain	Piute	Utah
Field	Lease or Unit	Well no.
Utah High Plateau (Wildcat)	Rocky Ford	#1
11/1/84 7427	Day-110 (57') - Drlg. (8-5/8" @ 5385') MW: 8.8# Vis: 38 Pv/Yp: 10/5 (250 gpm) Air dn parasite string to 2523' (800 cfm) Drld to 7400'. POH. Inspect BHA. RIH. Rnd 100' to btm. Drld 7-7/8" hole to PD.	
11/2/84 7540	Day-111 (113') - Drlg. (8-5/8" @ 5385') MW: 8.7# Vis: 38 Pv/Yp: 9/5 (250 gpm) Air dn parasite string to 2523' (800 cfm) Drld 7-7/8" hole to PD. Had to wrk tite hole & stuck pipe once. 80 BM lost. Survey: 1° @ 7352'.	
11/3-5 7863	Day-114 (323') - Drlg. (8-5/8" @ 5385') MW: 8.7# Vis: 36 Pv/Yp: 9/4 (220 gpm) Air dn parasite string to 2523' (800 cfm) Drld 7-7/8" hole to PD w/TFNB @ 7845'. Surveys: 6° @ 7500', 8-1/2° @ 7820'.	

District	County or Parish	State
Rocky Mountain	Piute	Utah
Field	Lease or Unit	Well no.
Utah High Plateau (Wildcat)	Rocky Ford	#1
Date and depth as of 8:00 a.m.	Complete record for each day while drilling or workover in progress	
11/6/84 7916	<p>Day-115 (53') - Rmg. (8-5/8" @ 5385')</p> <p>MW: 8.7# Vis: 37 Pv/Yp: 9/5 (220 gpm)</p> <p>Air dn parasite string to 2523' (800 cfm)</p> <p>Drld 7-7/8" hole to PD. POH. Chg BHA. RIH. Rnd 6900-7225'. Survey: 10° @ 7906'.</p>	
11/7/84 7952	<p>Day-116 (36') - Drlg. (8-5/8" @ 5385')</p> <p>MW: 8.8# Vis: 37 Pv/Yp: 10/4 (220 gpm)</p> <p>Air dn parasite string to 2523' (800 cfm)</p> <p>Fin rmg to TD. Drld 7-7/8" hole to PD.</p>	
11/8/84 8036	<p>Day-117 (84') - Drlg. (8-5/8" @ 5385')</p> <p>MW: 8.8# Vis: 37 Pv/Yp: 9/4 (220 gpm)</p> <p>Air dn parasite string to 2523' (800 cfm)</p> <p>Drld 7-7/8" hole to PD. Survey: 9-3/4° @ 7986'.</p>	
11/9/84 8089	<p>Day-118 (53') - RIH. (8-5/8" @ 5385')</p> <p>MW: 8.8# Vis: 38 Pv/Yp: 11/6 (220 gpm)</p> <p>Air dn parasite string to 2523' (800 cfm)</p> <p>Drld 7-7/8" hole to PD w/tite conn @ 8057'. Made 5 std sht trip & plugged bit. Drop survey & POH w/wet string. Cln bit & RIH. Survey: 9-1/4° @ 8049'.</p>	
11/10-13 8429	<p>Day-122 (340') - Drlg. (8-5/8" @ 5385')</p> <p>MW: 8.7# Vis: 38 Pv/Yp: 10/4 (220 gpm)</p> <p>Air dn parasite string to 2523' (800 cfm)</p> <p>RIH. Rnd tite spt @ 5912', wsh 90' to btm. Drld 7-7/8" hole to PD w/trip f/BHA @ 8249'. Survey: 8° @ 8233'.</p>	
11/14/84 8520	<p>Day-123 (91') - Drlg. (8-5/8" @ 5385')</p> <p>MW: 8.8# Vis: 38 Pv/Yp: 10/5 (221 gpm)</p> <p>Air dn parasite string to 2523' (800 cfm)</p> <p>Drld 7-7/8" hole to PD. 150 BM lost to fm. Mix LCM sweep.</p>	
11/15/84 8623	<p>Day-124 (103') - Drlg. (8-5/8" @ 5385')</p> <p>MW: 8.8# Vis: 37 Pv/Yp: 10/5 (221 gpm)</p> <p>Air dn parasite string to 2523' (800 cfm)</p> <p>Drld 7-7/8" hole to PD.</p>	
11/16/84 8728	<p>Day-125 (105') - Drlg. (8-5/8" @ 5385')</p> <p>MW: 8.8# Vis: 37 Pv/Yp: 10/5 (221 gpm)</p> <p>Air dn parasite string to 2523' (800 cfm)</p> <p>Drld 7-7/8" hole to PD.</p>	

CONFIDENTIAL INFORMATION

District	County or Parish	State
Rocky Mountain	Piute	Utah
Field	Lease or Unit	Well no.
Utah High Plateau (Wildcat)	Rocky Ford	#1

CONFIDENTIAL INFORMATION

11/17-19 8999	Day-128 (271') - Wsh & rm w/CB. (8-5/8" @ 5385') MW: 8.8# Vis: 38 Pv/Yp: 11/5 (220 gpm) Air dn parasite string to 2523' (800 cfm) Drld to 8743'. POH. Inspect BHA. RIH. Rnd 90' to btm. Drld 7-7/8" hole to PD. POH. PU CB. RIH. Wsh & rm 8935-8989'. Surveys: 8° @ 8716', 6-1/2° @ 8965'
11/20/84 9067	Day-129 (68') - Circ smpls. (8-5/8" @ 5385') MW: 8.8# Vis: 39 Pv/Yp: 11/5 (220 gpm) Air dn parasite string to 2523' (800 cfm) Cut Core #1, 8999-9014' & bbl jammed. POH. Cut 15', rec'd 10'. RIH w/bit. Wsh 30' to btm. Drld 7-7/8" hole to PD. Circ smpls @ 9035' & 9067'.
11/21/84 9316	Day-130 (249') - Drlg. (8-5/8" @ 5385') MW: 8.8# Vis: 36 Pv/Yp: 10/4 (221 gpm) Air dn parasite string to 2523' (800 cfm) Drld 7-7/8" hole to PD. Circ smpls @ 9067', 9089', & 9119'.
11/22-26 9350	Day-135 (34') - LD 4-1/2" DP. (8-5/8" @ 5385') MW: 8.8# Vis: 38 Pv/Yp: 9/5 (221 gpm) Air dn parasite string to 2523' (750 cfm) Drld 7-7/8" hole to PD. Circ & cond mud. Sht trip. Circ & cond mud. POH. RU Schl Ran DLL/MSFL/GR, FDT/CNL/GR/Cal, BHCS/GR, DIL/SFL/GR & Dipmeter. TIH. Circ & cond hole. TOH. Ran chk shot survey. RD Schl. TIH. Circ & cond hole. TOH to 5385' (8-5/8" csg shoe). WO 5-1/2" csg. TIH. Circ & cond hole. 5-1/2" csg arrived on loc 1900 hrs 11/25/84. Unload same. TOH & LD 4-1/2" DP.
11/27/84 9350	Day-136 (0') - ND BOP stack. (8-5/8" @ 5385') Fin LD DP & BHA. RU csg crew & ran DFFS, 2 jts 5-1/2" 17# L-80 LTC csg, DFFC, 217 jts 5-1/2" 17# L-80 LTC csg. Csg lnd'd @ 9347' w/DFFC @ 9258'. Circ & cond hole. Cmt w/280 sx Howco Lite w/add foll'd by 230 sx Cl "H" cmt w/add. Pmpd 750 cfm air dn parasite string during cmt job & had full returns thruout. Plug bmpd & flts held. CIP 2230 hrs 11/26/84. Set csg slips w/175M#.
11/28/84 9350	Day-137 TD PBD: 9258' (FC) - <u>WO evaluation.</u> (5-1/2" @ 9347') Fin ND BOPE. NU tbghd. RR 1800 hrs 11/26/84. <u>WO evaluation. (Drop f/report until evaluation commences.)</u>

ORAL APPROVAL TO PLUG AND ABANDON WELL

File

Operator ARCO Representative Suzanne Barnes
 (303) 293-1077

Well No. Rocky Ford #1 Location 1/4 1/4 Section 27 Township 30S Range 3W

County Paute Field _____ State _____

Unit Name and Required Depth _____ Base of fresh water sands _____

T.D. 9316' Size hole and Fill per sack _____ " _____ Mud Weight and Top _____ #/gal. _____

Casing Size	Set At	Top of Cement	To Be Pulled	From	Plugging Requirements To	Sacks Cement
16"	1669'			① 7000	7200	
10 3/4"	4993'			② 4600	5000	
8 5/8"	4774-5385'			③ 1600	1800	
Formation	Top	Base	Shows	④ Surf.	200	
Volcanics	Surface					
Carnel	5176'					
Navajo	5269'					
Hajenta	6527'					
Chinle	6930'					
Shinarump	7280'					
Moenkopi	7380'					
Sinbad	8596'					
Woodside	8925'					
Karibab	8938'					

REMARKS

DST's, lost circulation zones, water zones, etc., Lost circ. - 4900-5385'

They have asked for approval to inject fluids from reserve pit.

We approved under following conditions: ① Inject between 1st & 2nd plugs.

② Approx 10K-20K bbl pumped.

③ No injection if fresh waters were encountered.

④ Limit surface pressure to 2000 psi.

Approved by IRB Date 11/21/84 Time 1400 a.m. p.m.

- Appd by Assad Raffoul.

- This approval was modified by conversation w/ Suzanne Barnes on 12/7/84.

ARCO Oil and Gas Company
Rocky Mountain District
707 17th Street
Mailing address: P.O. Box 5540
Denver, Colorado 80217
Telephone 303 575 7000



December 10, 1984
State of Utah
Department of Natural Resources
Division of Oil, Gas & Mining
4241 State Office Building
Salt Lake City, Utah 84114

Re: Monthly Report of Operations
Well No. Rocky Ford #1
NE SW, Sec. 27-30S-3W
Piute, UT

Gentlemen:

Attached, in duplicate, is the Monthly Report of
Operations for the month of November, 1984,
on the subject well.

This well was spudded on July 14, 1984.

Very truly yours,

B.R. Still

B.R. Still, Supervisor
Operations Information Group

BRS:af

TIGHT HOLE
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPlicate
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. <input type="checkbox"/> OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER		5. LEASE DESIGNATION AND SERIAL NO. U-26805	
2. NAME OF OPERATOR ARCO Oil and Gas Company, Division of Atlantic Richfield Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME ---	
3. ADDRESS OF OPERATOR P.O. Box 5540, Denver, Colorado 80217		7. UNIT AGREEMENT NAME ---	
4. LOCATION OF WELL (Report location clearly and in accordance with any State regulations. See also space 17 below.) At surface <p style="text-align: center;">2030' FSL & 1645' FWL</p>		8. FARM OR LEASE NAME Rocky Ford	
14. PERMIT NO. 43-031-30012		9. WELL NO. 1	
15. ELEVATIONS (Show whether DF, RT, OR, etc.) 7236' GL		10. FIELD AND POOL, OR WILDCAT Wildcat	
16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 27-30S-3W	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	12. COUNTY OR PARISH Piute	
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	13. STATE Utah	
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>		
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>		
(Other) <input type="checkbox"/>			18. STATE Utah

CONFIDENTIAL

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF <input type="checkbox"/>	PULL 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>5 1/2" casing</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.)

Drilled ahead. Core #1 8999'-9014'. Logged @ TD 9350'. RU and ran 219 jts 5 1/2" 17#, L-80, LTC casing and set @ 9347'KB. Cemented with 280 sx lite + 10#/sx gilsonite followed by 230 sx Class "H" + 0.6% Halad-9, 0.75% CFR-2 + 1/2#/sx flocele.

Released rig 11-26-84.

Waiting on completion.

RECEIVED

DEC 13 1984

DIVISION OF
OIL, GAS & MINING

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

SIGNED <u>L.B. Morse</u>	TITLE <u>Operations Manager</u>	DATE <u>12-7-84</u>
(This space for Federal or State office use)		

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY: _____

*See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
(FORM 9-329)
(2/76)
OMB 42-RO 356

MONTHLY REPORT
OF
OPERATIONS

Lease No. U-26805
Communitization Agreement No. _____
Field Name Wildcat
Unit Name _____
Participating Area _____
County Piute State UT
Operator Atlantic Richfield Company
 Amended Report (Rocky Ford #1)

The following is a correct report of operations and production (including status of all unplugged wells) for the month of November, 19 84

(See Reverse of Form for Instructions)

This report is required by law (30 U.S.C. 189, 30 U.S.C. 359, 25 U.S.C. 396 d), regulation (30 CFR 221.60), and the terms of the lease. Failure to report can result in the assessment of liquidated damages (30 CFR 221.54 (j)), shutting down operations, or basis for recommendation to cancel the lease and forfeit the bond (30 CFR 221.53).

Well No.	Sec. & 1/4 of 1/4	TWP	RNG	Well Status	Days Prod.	*Barrels of Oil	*MCF of Gas	*Barrels of Water	Remarks
1	NESW Sec. 27	30S	3W	DRG	0	0	0	0	This well spudded on 7/14/84. Please see attached drilling report. Dropped from report. Waiting for evaluation.

RECEIVED
DEC 14 1984
DIVISION OF
OIL, GAS & MINING

CONFIDENTIAL INFORMATION

*If none, so state.

DISPOSITION OF PRODUCTION (Lease, Participating Area, or Communitized Area basis)

	Oil & Condensate (BBLs)	Gas (MCF)	Water (BBLs)
*On hand, Start of Month	0	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
*Produced	0	0	0
*Sold	0	0	XXXXXXXXXXXXXXXXXXXX
*Spilled or Lost	0	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
*Flared or Vented	XXXXXXXXXXXXXXXXXXXX	0	XXXXXXXXXXXXXXXXXXXX
*Used on Lease	0	0	XXXXXXXXXXXXXXXXXXXX
*Injected	0	0	0
*Surface Pits	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	0
*Other (Identify)	0	0	0
*On hand, End of Month	0	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
*API Gravity/BTU Content	0	0	XXXXXXXXXXXXXXXXXXXX

Authorized Signature: B. R. Stell Address: P.O. Box 5540, Denver, CO 80217
Title: Supervisor, Operations Info. Group Page 1 of 1

DRY HOLE
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPlicate
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

LEASE DESIGNATION AND SERIAL NO.

U-26805

IF INDIAN, ALLOTTEE OR TRIBE NAME

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 type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input checked="" type="checkbox"/></p> <p>2. NAME OF OPERATOR ARCO Oil and Gas Company, Division of Atlantic Richfield Company</p> <p>3. ADDRESS OF OPERATOR P.O. Box 5540, Denver, Colorado 80217</p> <p>4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 2030' FSL & 1645' FWL</p>	<p>UNIT AGREEMENT NAME ---</p> <p>5. FARM OR LEASE NAME Rocky Ford</p> <p>6. WELL NO. 1</p> <p>10. FIELD AND POOL, OR WILDCAT Wildcat</p> <p>11. SEC., T., R., M., OR S.E.C. AND SURVEY OR AREA 27-30S-3W</p> <p>12. COUNTY OR PARISH: 13. STATE Piute Utah</p>
<p>14. PERMIT NO. 43-031-30012</p>	<p>15. ELEVATIONS (Show whether DF, RT, CR, etc.) 7236' GL</p>

CONFIDENTIAL

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"/>	PULL 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 PLANE <input type="checkbox"/>	(Other) <input 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.)*

As was agreed to between Rod Lister (Richfield-BLM) and Suzanne Barnes, (ARCO Oil and Gas Company) the reclamation on the drillsite and access road for the subject well will be commenced in the Spring of 1985 due to the current weather conditions within the area. The rig has been moved off location, the fourth side of the reserve pit has been fenced and the dry hole marker set.

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

SIGNED L.B. Moise / jey TITLE Operations Manager DATE 12-20-84

(This space for Federal or State office use)

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

*See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE

(See other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0137
Expires August 31, 1985

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. RENVR. Other _____

2. NAME OF OPERATOR
ARCO Oil and Gas Company, Division of Atlantic Richfield Company

3. ADDRESS OF OPERATOR
P.O. Box 5540, Denver, Colorado 80217

4. LOCATION OF WELL (Report location clearly and in accordance with any State Regulations)
At surface 2030' FSL & 1645' FWL NESW

At top prod. interval reported below

At total depth API #43-031-30012

14. PERMIT NO. DATE ISSUED
BLM 5-15-84

15. DATE SPUNDED 16. DATE T.D. REACHED 17. DATE COMPL. (Ready to prod.) 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 19. ELEV. CASINGHEAD
7-14-84 11-22-84 P&A 12-12-84 7226'GL 7248'KB 7226'

20. TOTAL DEPTH, MD & TVD 21. PLUG, BACK T.D., MD & TVD 22. IF MULTIPLE COMPL. HOW MANY* 23. INTERVALS DRILLED BY ROTARY TOOLS CABLE TOOLS
9350' Surface P&A P & A 0-9350'

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
PLUGGED AND ABANDONED

25. WAS DIRECTIONAL SURVEY MADE
NO

26. TYPE ELECTRIC AND OTHER LOGS RUN
DLL/MSEL LDI/CNL DIL/SFL BHC

27. WAS WELL CORED
YES

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
24"	94#	102'KB	32"	360 sx	---
16"	75#	1669'KB	22"	2485 sx (top jog-300 sx)	---
10-3/4"	55.5#	5015'KB	14-3/4"	2810 sx (top job-500sx)	---
5 1/2"	17#	9347'KB	7-7/8"	510 sx	129 jts

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
8-5/8"	4766'	5385'	175 sx			NONE	

PROTECTOVE CASING

31. PERFORATION RECORD (Interval, size and number)

9100'-9135' 2 SPF

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
8707'	Squeeze with 100 sx Class "H"

33.* PRODUCTION

DATE FIRST PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) WELL STATUS (Producing or shut-in)
----- PLUGGED AND ABANDONED ----- DJA

DATE OF TEST HOURS TESTED CHOKE SIZE PROD'N. FOR TEST PERIOD OIL—BBL. GAS—MCF. WATER—BBL. GAS-OIL RATIO
----- PLUGGED AND ABANDONED -----

FLOW. TUBING PRESS. CASING PRESSURE CALCULATED 24-HOUR RATE OIL—BBL. GAS—MCF. WATER—BBL. OIL GRAVITY-API (CORR.)
----- PLUGGED AND ABANDONED -----

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) TEST WITNESSED BY
----- 850913 -----

35. LIST OF ATTACHMENTS
Daily Well History

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

SIGNED L.B. Morse TITLE Operations Manager DATE 12-20-84
L.B. Morse

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

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Core #1	8999'	9014'	Cut 15' and recovered 10'
			PLUGGED AND ABANDONED AS FOLLOWS:
	PLUG #1	4987'-4587'	140 sx Class "H"
	PLUG #2	1800'-1600'	100 sx Class "H"
	PLUG #3	200'-Surf	100 sx Class "H"

38. GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH
Volcanics	Surface	
Carmel	5176'	
Navajo	5269'	
Kayenta	6527'	
Chinle	6930'	
Shinarump	7280'	
Moenkopi	7380'	
Sinbad	8596'	
Woodside	8825'	
Kaibab	8938'	

TIGHT HOLE
UNIT STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIP
(Other instructions re-
verse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

LEASE DESIGNATION AND SERIAL NO.

U-26805

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input checked="" type="checkbox"/>		7. UNIT AGREEMENT NAME	
2. NAME OF OPERATOR ARCO Oil and Gas Company, Division of Atlantic Richfield Company		8. FARM OR LEASE NAME Rocky Ford	
3. ADDRESS OF OPERATOR P.O. Box 5540, Denver, Colorado 80217		9. WELL NO. 1	
4. LOCATION OF WELL. Report location clearly and in accordance with any State requirements.* See also space 17 below. At surface 2030' FSL & 1645' FWL		10. FIELD AND POOL, OR WILDCAT Wildcat	
14. PERMIT NO. 43-031-30012		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 27-30S-3W	
15. ELEVATIONS (Show whether OF, RT, OR, etc.) 7236' GL		12. COUNTY OR PARISH 13. STATE Piute Utah	

CONFIDENTIAL

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"/>	PULL 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 checked="" type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input 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.)

MI & RU Completin Unit. RIH with bit and casing scraper and tag bottom @ 9238'KB. Set packer @ 8971'KB. Ran CBL. Perf'd 9100'-9135'. Swabbed. Moved packer to 8707'KB. Cement squeeze with 100 sx Class "H" cement displaced with 48 bbls water.

Propose to P & A as follows: #1 4987'-4587'
#2 1800'-1600'
#3 200'-Surface

Verbal permission from:

Assad Raffoul, BLM-Salt Lake City
John Bazza, Utah Oil and Gas- Salt Lake City

to Suzanne Barnes, ARCO Oil and Gas Company, on 11-21-84 and again 12-7-84.

RECEIVED
DEC 24 1984

DIVISION OF OIL, GAS & MINING

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

SIGNED L.B. Morse TITLE Operations Manager DATE 12-18-84

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____

CONDITIONS OF APPROVAL, IF ANY:

ACCEPTED
APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING
DATE: 1/13/85

*See Instructions on Reverse Side

TIGHT HOLE.
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIP
Other instructions
reverse side

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

LEASE DESIGNATION AND SERIAL NO.
U-26805

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input checked="" type="checkbox"/>		3. UNIT AGREEMENT NAME ---
2. NAME OF OPERATOR ARCO Oil and Gas Company, Division of Atlantic Richfield Company		5. FARM OR LEASE NAME Rocky Ford
3. ADDRESS OF OPERATOR P.O. Box 5540, Denver, Colorado 80217		6. WELL NO. 1
4. LOCATION OF WELL: Report location clearly and in accordance with any State requirements. See also space 17 below. At surface 2030' FSL & 1645' FWL		10. FIELD AND POOL, OR WILDCAT Wildcat
14. PERMIT NO. 43-031-30012		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 27-30S-3W
15. ELEVATIONS (Show whether OP, FT, CR, etc.) 7236' GL		12. COUNTY OR PARISH 13. STATE Piute Utah

CONFIDENTIAL

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"/>	PULL 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 ACIDISE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input checked="" type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANE <input type="checkbox"/>	(Other) _____	

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

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

Cut off 5 1/2" casing and LD 129 jts. Plugged and abandoned as follows:

Plug #1	4987'-4587'	140 sx Class "H"
Plug #2	1800'-1600'	100 sx Class "H"
Plug #3	200'-Surf	100 sx Class "H"

- Cut off casinghead.
- Set dry hole marker.
- Released rig 12-12-84.
- Cellar filled and pit fenced.

RECEIVED
DEC 24 1984

DIVISION OF
OIL, GAS & MINING

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

SIGNER L.B. Moise TITLE Operations Manager DATE 12-18-84

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____

CONDITIONS OF APPROVAL, IF ANY:

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

DATE: 1/3/85
BY: John R. Dye

*See Instructions on Reverse Side

ARCO Oil and Gas Company
Rocky Mountain District
707 17th Street
Mailing address: P.O. Box 5540
Denver, Colorado 80217
Telephone 303 575 7000



January 18, 1985

State of Utah
Department of Natural Resources
Division of Oil, Gas & Mining
4241 State Office Building
Salt Lake City, Utah 84114

Re: Monthly Report of Operations
Well No. Rocky Ford #1
NE SW, Sec. 27-30S-3W
Piute, UT

Gentlemen:

Attached, in duplicate, is the Monthly Report of
Operations for the month of December, 1984,
on the subject well.

This well was spudded on July 14, 1984.

Very truly yours,

B. R. Still

B.R. Still, Supervisor
Operations Information Group

BRS:af

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**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

Form 3160-6
(November 1983)
(Formerly 9-329)

**MONTHLY REPORT
OF
OPERATIONS**

Lease No. U-26805
 Communitization Agreement No. _____
 Field Name Wildcat
 Unit Name _____
 Participating Area _____
 County Piute State UT
 Operator Atlantic Richfield Company
 Amended Report (Rocky Ford #1)

The following is a correct report of operations and production (including status of all unplugged wells) for the month of December, 19 84

(See Reverse of Form for Instructions)

This report is required by law (30 U.S.C. 189, 30 U.S.C. 359, 25 U.S.C. 396d), regulation (43 CFR 3162.4-3), and the terms of the lease. Failure to report can result in the assessment of liquidated damages, (43 CFR 3160), penalties, shutting down operations, or basis for recommendation to cancel the lease and forfeit the bond (43 CFR 3160).

Well No.	Sec. & 1/4 of 1/4	TWP	RNG	Well Status	Days Prod.	*Barrels of Oil	*MCF of Gas	*Barrels of Water	Remarks
1	NE SW Sec. 27	30S	3W	P&A	0	0	0	0	This well was spudded on 7/14/84. Final Report-P&A on 12/12/84.

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*If none, so state.

DISPOSITION OF PRODUCTION (Lease, Participating Area, or Communitized Area basis)

	Oil & Condensate (BBLS)	Gas (MCF)	Water (BBLS)
*On hand, Start of Month	0	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
*Produced	0	0	0
*Sold	0	0	XXXXXXXXXXXXXXXXXX
*Spilled or Lost	0	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
*Flared or Vented	XXXXXXXXXXXXXXXXXX	0	XXXXXXXXXXXXXXXXXX
*Used on Lease	0	0	XXXXXXXXXXXXXXXXXX
*Injected	0	0	0
*Surface Pits	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	0
*Other (Identify)	0	0	0
*On hand, End of Month	0	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
*API Gravity/BTU Content	0	0	XXXXXXXXXXXXXXXXXX

Authorized Signature: B.R. Hill Address: P.O. Box 5540, Denver, CO 80217
 Title: Supervisor, Operations Info. Group Page 1 of 1

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

ARCO Exploration Company

Record Of Shipment Of Confidential Information

ARCO Oil and Gas Company

District

To
State of Utah - Natural Resources
3 Trade Center, Suite 350
SLC UT 84180-1203

From
ARCO Exploration - G. S. Wise
P.O. Box 5540
Denver, CO 80217

Enclosed Under separate cover Via

Subject

Completion Data

Page 2 of 2

Quantity

Map number & description

4 #1 Forest Creek Divide

(1) Dual Laterlog-MSFL; (1) Borehole Compensated Sonic;
(1) Litho Density Compensated Neutron; (1) Core Analysis Report

6 #1 Jeep Trail

(1) Dual Laterlog-MSFL-Gamma Ray-SP; (1) Borehole
Compensated Sonic; (1) Compensated Neutron Litho-
Density-Gamma; (2) Drill Stem Test Reports; (1) Core
Analysis Report.

4 #1 Rocky Ford

(1) Dual Laterlog-MSFL; (1) Borehole Compensated Sonic;
(1) Litho Density Compensated; (1) Core Analysis
Report

Note—Please verify and acknowledge receipt, by signing and returning the second copy of this transmittal.

Signed by C. Hayes for G. S. Wise

Date 3/18/85

Received by

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Remarks

MAR 20 1985

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