

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT - " for such proposals

5. Lease Designation and Serial No.

NM-013688

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Atlantic LS

2

9. API Well No.

3004510585

10. Field and Pool, or Exploratory Area

Blanco Mesaverde

11. County or Parish, State

San Juan

New Mexico

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

Attention:

Patty Haeefe

3. Address and Telephone No.

P.O. Box 800, Denver, CO 80201

(303) 830-4988

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

1650' FNL

1450' FEL

Sec. 24 T 31N R 10W

Unit G

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

TYPE OF ACTION

- ☒ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment Notice

- ☐ Abandonment
☐ Recompletion
☐ Plugging Back
☐ Casing Repair
☐ Altering Casing
☒ Other Sidetrack

- ☐ Change of Plans
☐ New Construction
☐ Non-Routine Fracturing
☐ Water Shut-Off
☐ Conversion to Injection
☐ Dispose Water

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

13. 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.)*

Amoco Production Company requests permission to sidetrack this wellbore in the Mesaverde per the attached procedure.

RECEIVED
FEB 23 1996

OIL CON. DIV.
DIST. 3

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

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

Signed

Patty Haeefe

Title

Staff Assistant

Date

02-05-1996

(This space for Federal or State office use)

Approved by

Title

Conditions of approval, if any:

APPROVED

FEB 09 1996

DISTRICT MANAGER

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 representations as to any matter within its jurisdiction.

Order Required

* See Instructions on Reverse Side

NMOCD

January 27, 1996
Revised 02/02/96

Atlantic LS #2

1,650' FNL, 1,450' FEL Sect. 24, 31N, 10W
San Juan County, New Mexico
Sidetrack Procedures

RECEIVED
BLM FIELD ROOM
68 FEB -6 AM 11:06
970 HALLAM BLVD, NM

PREPARATION

1. MIRUSU complete with 3.5 power swivel, cementing equipment, circulating equipment and rental string of 2.875" drill pipe or Hydril PH-6 tubing and 6-3.750" drill collars. Ensure that the drill pipe and collars have recent inspection papers.
2. Blow down well, ND tree, NUBOPS and pull 2.375" tubing. (Landed at 5,734'--crimped on bottom and perf'd at 5,155--5,186'. Perf'd sub at 5,675'. May be stuck) If stuck, cut at 5,000' and lay down.
3. Pick up drill pipe and set CIBP at 4,950'. Circulate hole with fresh water. Mix and pump 25 sx Class "B" cement (ncat) at 15.7 ppg and spot on top of bridge plug (100'+). POH.
4. Test casing to 750 psi. If test positive, proceed to step 5. If casing leaks, pick up RTTS packer and isolate hole(s).
5. Run CBL from 4,400' to top of cement (3,260' by TS). Check for good cement at KOP of 3,800-4,200' and check for cement below surface pipe at 170' to see if previous operators pumped down bradenhead. If no good cement is found at KOP, perforate, set retainer 100' above holes and squeeze with 100 sx of 50:50 Pozmix containing 0.4 % Halad 344, 0.25 #/sx flocele, and 5-10 #/sx Gilsonite and CAL-SEAL as recommended by Howco. Remainder of bradenhead work will depend on CBL but will probably require the following steps.
6. Perforate 4 JSPF at 3,032' (top of Fruitland) unless casing leaks found near this depth.
7. Set cement retainer at 2,975' and attempt to establish circulation to bradenhead. If circulation obtained, mix and pump sufficient cement to circulate. Use same cement mixture as in step #5 and proceed to step #9. If no circulation obtained, squeeze holes with 100 sx of the same and proceed to step #8.
8. Perforate 4 JSPF at 1,200' (above Ojo Alamo), set retainer at 1,100' and repeat step #7.
9. WOC. NDBOPS, install casing spool above bradenhead to receive the 4.500" long string. NUBOPS.
10. Pick up 6.250" tooth bit with premium bearings, 6-3.750" drill collars on the drill pipe (tubing) and drill out cement and retainers. Test each perforated interval to 750 psi after drilling and re-squeeze with 100 sx cement if necessary. Re-run CBL if cement at KOP is questionable

11. RDMOSU.

Atlantic LS #2

SIDETRACK

page 2

1. MIRURT complete with 3.500" drill string, air package and misting equipment. NUBOPS and test to 2,000 psi with third party tester on first well and every third well thereafter.
2. Orient Smith Anchor-Stock whipstock at KOP at 90 degrees with gyro, running gyro from surface for tie-in. Mill window utilizing air/mist, reaming window sufficiently to run directional and stiff bottom hole assemblies without problem.
3. Pick up premium, gage protected, 6.125" TC bit (Smith diamond enhanced gage F37 DODPD w/motor or F37 DP conventional), directional equipment and cut curve as indicated on the attached directional program. Trip out when bit wears out and pick up stiff bottom hole assembly with monel collar and rotate ahead to total measured depth. Take single shot surveys every 150-200' to make certain the general azimuth direction is acceptable and that the angle is not dropping excessively. A final directional plot is required at TMD by the NMOCD. Bottom hole location must not exceed 660' to East. Generally, the directional program is as follows.

KOP--	4,000' TVD
Orientation--	90 +/- 20 degrees
Curve--	5 degrees/100'
Maximum angle--	28-30 degrees
Total depth--	5,900' TVD 6,000" TMD

4. Lay down the 3.500" drill string, run 4.500" used casing using a marker joint at 1,000' from bottom. Utilize stand-off bands (4.625" x 6.000") every second joint on the lower 20 joints and every third joint thereafter up to 100' inside the existing 7.000" casing.
5. Cement w/325 sx (60% excess) 50:50 Pozmix containing 2 % gel, 6 % salt, 0.4 % Halad 344, 0.25 #/sx floccle, 5 #/sx gilsonite. Pump 20 bbls water ahead, mix and pump cement at 13.5-14.0 ppg and displace with water. Utilize two wiper plugs (discuss w/ Howco--attempt to ensure that the cement is completely wiped from the casing to allow a rigless completion). This single stage job should bring cement at least 500' inside the 7.000" casing. Reciprocate the casing throughout the cement job, passing joints. Land casing in full tension. Run temperature survey 10-12 hours after bumping plug.

6. RDMORT.



brad

02/02/96 6:16 AM

SJOET Well Work Procedure

Name Atlantic LS #2
Version: Preliminary
Date: February 2, 1996
Budget: Repair
Repair Type: Sidetrack Completion

Objectives:

1. Complete new sidetrack wellbore in Mesaverde.
-

Pertinent Information:

Location:	1650' FNL x 1450' FEL, Sec 24, T31N-R10W	Horizon:	MV
County:	San Juan	API #:	3004510585
State:	New Mexico	Engr:	Kutas
Lease:	Fed NM 013688	Phone:	W-(303)830-5159
Well Flac:	978800		

Economic Information:

APC WI:	25%	Current MV Production	0 MCFD
Estimated Cost:	\$100,000	MV Anticipated Prod	400 MCFD
Payout:			
Max Cost -12 Mo. P.O.			
PV15:			
Max Cost PV15:	\$M		

Note: Economics will be run on all projects that have a payout exceeding ONE year.

Formation Tops: (Estimated formation tops)

Nacimiento:		Menefee:	5350'
Ojo Alamo:	2313'	Point Lookout:	5715'
Kirtland Shale:	2400'	Mancos Shale:	
Fruitland:	3032'	Gallup:	
Pictured Cliffs:	3360'	Graneros:	
Lewis Shale:	3418'	Dakota:	
Cliff House:	5215'	Morrison:	

Bradenhead Test Information:

Test Date:	Tubing:	Casing:	BH:	
Time	BH	CSG	INT	CSG
5 min				
10 min				
15 min				

Comments:

Atlantic LS #2

Orig. Comp. 11/53

TD = 6000', PBTD = 5900'

Elevations: GL = 6566'

Page 2 of 3

1. MIRU wireline unit. Run gauge ring to ensure clean casing. Tag for and report PBTD.
2. Run GR/CCL/TMD from TD' to 500' above to top of Cliffhouse. Fax log copy to Denver to select perforation intervals.
3. RU perforating equipment. Perforate PLO pay intervals using limited entry techniques. Perf intervals will be identified from TMD log. Utilize 3 1/8" HCP w/ 12.5 g charges (0.34" EHD, 13.13" Penetration).
4. Break down perforations using 2% Kcl water and 7/8" RCN balls w/ 1.1 SG. Recover balls with junk basket.
5. RU fracture stimulation equipment. Fracture stimulate PLO pay according to frac schedule A. Flowback well as soon as stimulation equipment is disconnected and moved off. Flow well back starting with 1/4" choke gradually increasing to 1/2" choke. Flow well back overnight or over weekend. Record flowing and shutin pressures, choke size, and liquid recoveries.
6. TIH w/ wireline and tag for fill. If sand fill is below next perf interval(s) then set wireline CIBP between MN and PLO. If sand fill is into MN section then a rig or CTU will be required to clean out fill prior to proceeding with completion.
7. Once CIBP is set, pressure test to ensure good seal.
8. RU perforating equipment. Perforate MN pay intervals using limited entry techniques. Perf intervals will be identified from TMD log. Utilize 3 1/8" HCP w/ 12.5 g charges (0.34" EHD, 13.13" Penetration).
9. Break down perforations using 2% Kcl water and 7/8" RCN balls w/ 1.1 SG. Recover balls with junk basket.
10. RU fracture stimulation equipment. Fracture stimulate MN pay according to frac schedule A. Flow back well as soon as stimulation equipment is disconnected and out of the way. Flow well back starting with 1/4" choke gradually increasing to 1/2" choke. Flow well back overnight or over weekend. Record flowing and shutin pressures, choke size, and liquid recoveries.
11. TIH w/ wireline and tag for fill. If sand fill is below next perf interval(s) then set wireline RBP between CH and MN. If sand fill is into CH section then a rig or CTU will be required to clean out fill prior to proceeding with completion.
12. Once RBP is set, pressure test to ensure good seal.
13. RU perforating equipment. Perforate CH pay intervals using limited entry techniques. Perf intervals will be identified from TMD log. Utilize 3 1/8" HCP w/ 12.5 g charges (0.34" EHD, 13.13" Penetration).
14. Break down perforations using 2% Kcl water and 7/8" RCN balls w/ 1.1 SG. Recover balls with junk basket.

Atlantic LS #2

Orig. Comp. 11/53

TD = 6000', PBTD = 5900'

Elevations: GL = 6566'

Page 3 of 3

15. RU fracture stimulation equipment. Fracture stimulate CH pay according to frac schedule
A. Flow back well as soon as stimulation equipment is disconnected and out of the way. Flow well back starting with 1/4" choke gradually increasing to 1/2" choke. Flow well back overnight or over weekend. Record flowing and shutin pressures, choke size, and liquid recoveries.
16. MIRUSU. TIH w/ tubing x bit and scraper. Clean out fill to RBP. Pull RBP. Clean out MN interval. DO CIBP. Clean out to PBTD.
17. Land 2 3/8" production tubing. Set tbg at approximately mid-perf depth' (1/2 mule shoe on bottom w/ seating nipple one joint up). Final setting depth will be selected based on pay intervals from TMD log. Flow well to clean up. Swab well in if necessary. RDMOSU.
18. Obtain gas and water samples. SI well pending equipment hook up. Turn well over to production.

Amoco Production Company

ENGINEERING CHART

Sheet No _____ Of _____

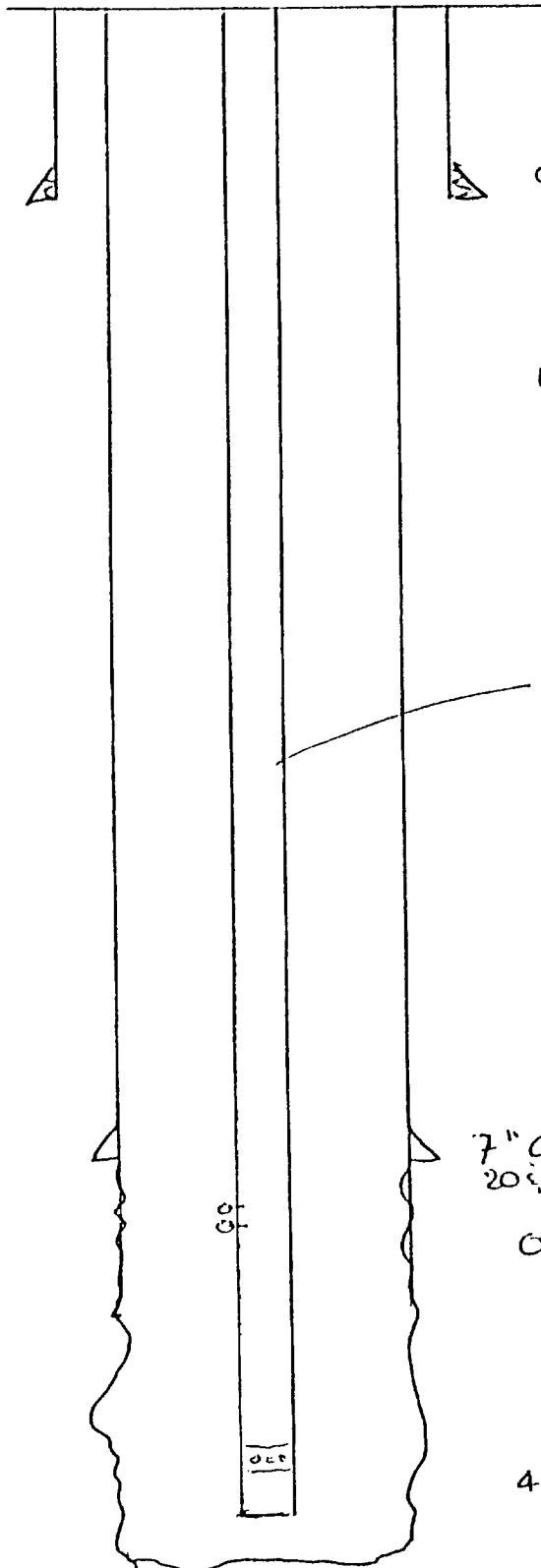
File _____

Appn _____

Date 9-21-95

By GMMK

SUBJECT ATLANTIC LS 2
246-T31N-R10W



9 5/8" CSA 170'
36# J55
CMT w/ 125 SXS CMT
Circ to SURF

NOTES: LOST CIRC @ 3426, 90, 5026

2 7/8" TSA 5734' 4.7# J55

Anchor SUB ON BTM
Perf SUB ABOVE Anchor @ 5675-5704'

7" CSA 5075' CMT w/ 500 SXS + 3% gel
20, 23# J55 TOC BY TWP = 3260'

O.H. FROM 5075 to 5760' (11/53)

Shot w/ 1800 QTS SN4 5120-5760 - NAT
Gauge @ 209 MCFD, TEST @ 7700 MCFD
SSIP/CP = 1043/1047 psi

4-3-63 - PERF 1/4" HOLES IN TBG @
5155' & 5186'

FINAL COPY

AMOCO PRODUCTION COMPANY DRILLING AND COMPLETION PROGRAM

File No.:

ethic02.dwg

Date:

2/2/96

Lease: Atlantic LS Well No. #2
 County: San Juan, New Mexico Location: 1650' FNL, 1450' FEL Sect. 24, 31N, 10W
 Former name: None Field: Basin Mesaverde 31 10

OBJECTIVE: Further exploit the Mesaverde.

METHOD OF DRILLING		APPROXIMATE DEPTHS OF GEOLOGICAL MARKER			
TYPE OF TOOLS	DEPTH OF DRILLING	Actual GL-----Estimated KB	6564	6576	
Rotary	0 - TD	Marker	True Vert Depth	Msd.Depth (ft.)	SS Elev. (ft.)
SPECIAL SURVEYS TYPE NONE	DEPTH	Ojo Alamo		2,313	4,263
		Kirtland		2,400	4,176
		Fruitland*		3,032	3,544
		Pictured Cliffs*		3,360	3,216
		Lewis Shale		3,418	3,158
		Cliff House*	5,119	5,215	1,457
		Menefee	5,253	5,350	1,323
		Point Lookout	5,608	5,715	968
		KOP		4,000	4,000
TOTAL DEPTH		6,900	6,000		
#Probable completion * Possible pay OJO ALAMO IS POSSIBLE USEABLE WATER					
SPECIAL TESTS		DRILL CUTTING SAMPLES		DRILLING TIME	
TYPE	DEPTH INTERVAL, ETC	FREQUENCY	DEPTH	FREQUENCY	DEPTH
None		As penetration rate pe ICP TD		Geolograph	0 - TD
Remarks:		Remarks:			
		Mud Logging Program:		None	
		Coring Program:		None	

MUD PROGRAM:

Approx. Interval	Type Mud	Weight, #/gal	Vis, sec/qt.	W/L, cc's/30 min.
0-----SCP	None--Recompletion only			
SCP---ICP	None--Recompletion only			
ICP---TD	Air/Mist	////		

REMARKS:

An air/mist circulating medium will be used as necessary to remove steel cuttings and to protect air motors.

CASING PROGRAM:

Casing String	Estimated Depth	Casing Size	Hole Size	Landing Point, Cement, Etc
Conductor				
Surface	In place			
Intermediate	In place			
Production	6,000	4 1/2"	6 1/8"	1

Remarks:

1. Production casing will be cemented back up into the 7,000" intermediate.

GENERAL REMARKS:

Well was drilled and completed in 1953. Will plug the existing open hole with CIBP set in 7,000' casing at 4,950' and 100' of Class "B" cement spotted on top (4,950'-4,850'). Casing will be tested, repaired if necessary and the upper water sands will be protected by circulating and /or squeezing with cement. A whipstock will be set at +/-4,000' and the well redrilled into the Mancos at an approximate 90 degree azimuth. Southern Rockies Engineering staff to design completion program.

Form 46 Reviewed by:

Logging program reviewed by:

PREPARED BY:

APPROVED:

APPROVED:

Kutas/bilyeu
Form 46 7-84bw 2/2/96

For Production Dept

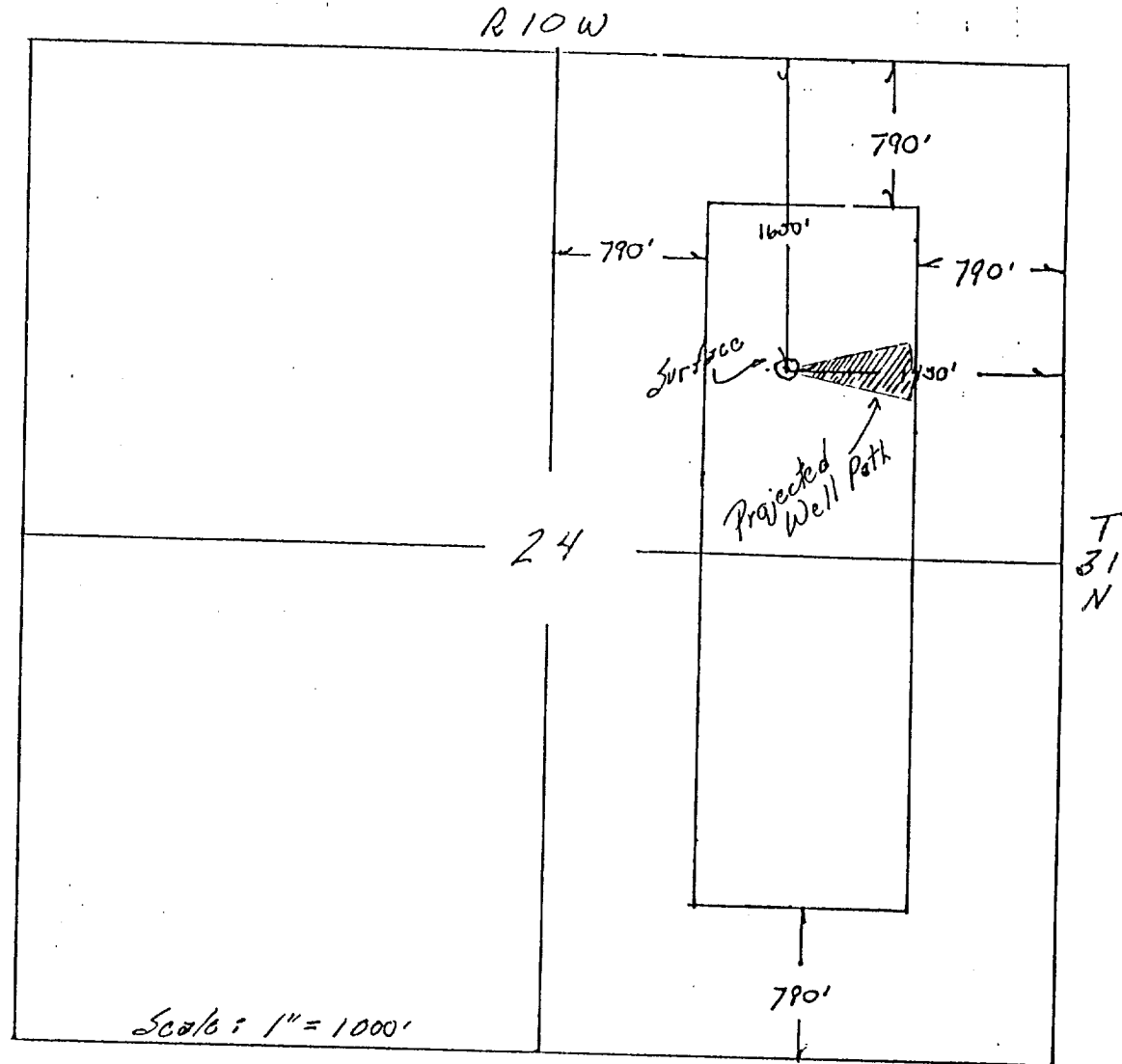
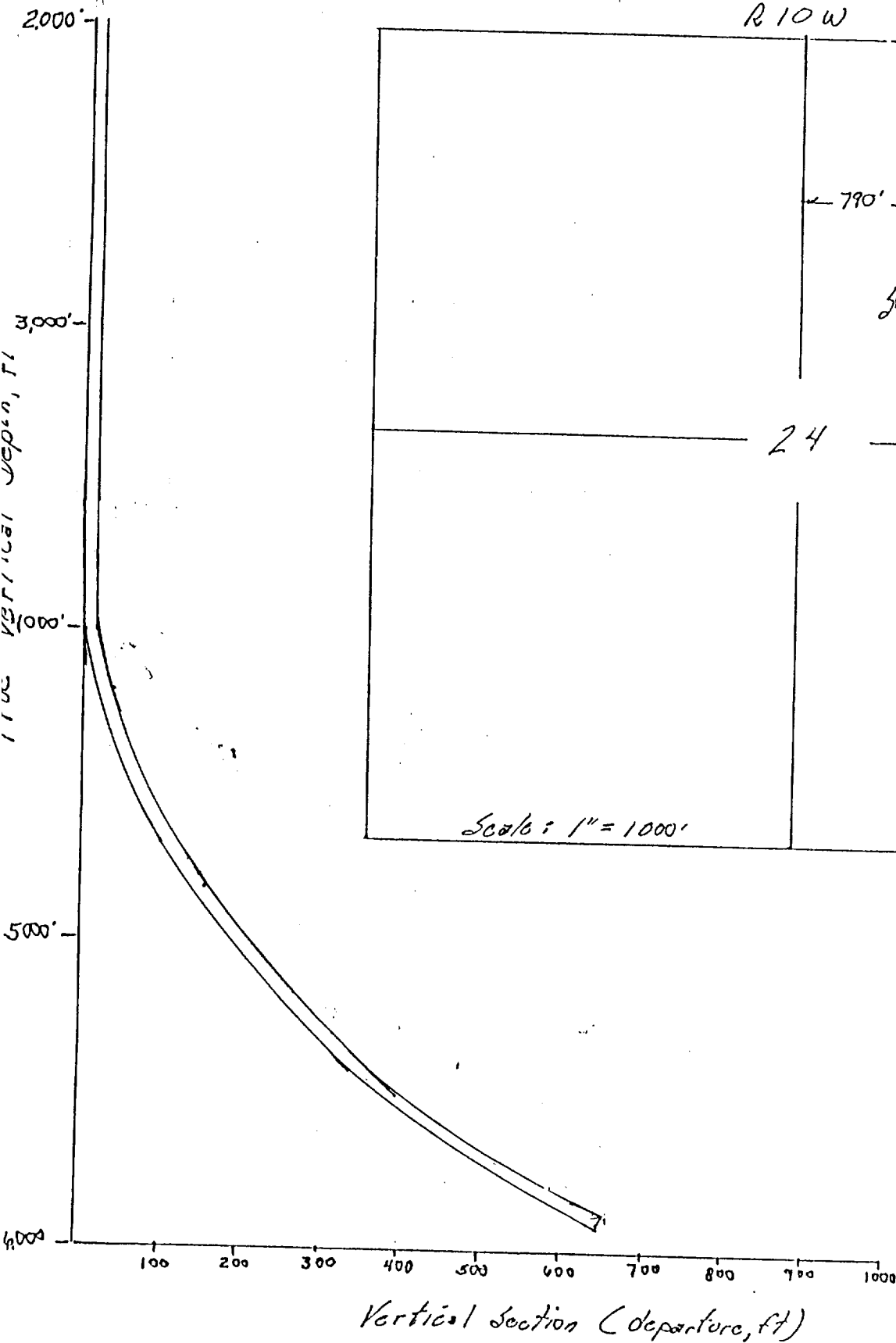
For Exploration Dept.

Amoco Production Company

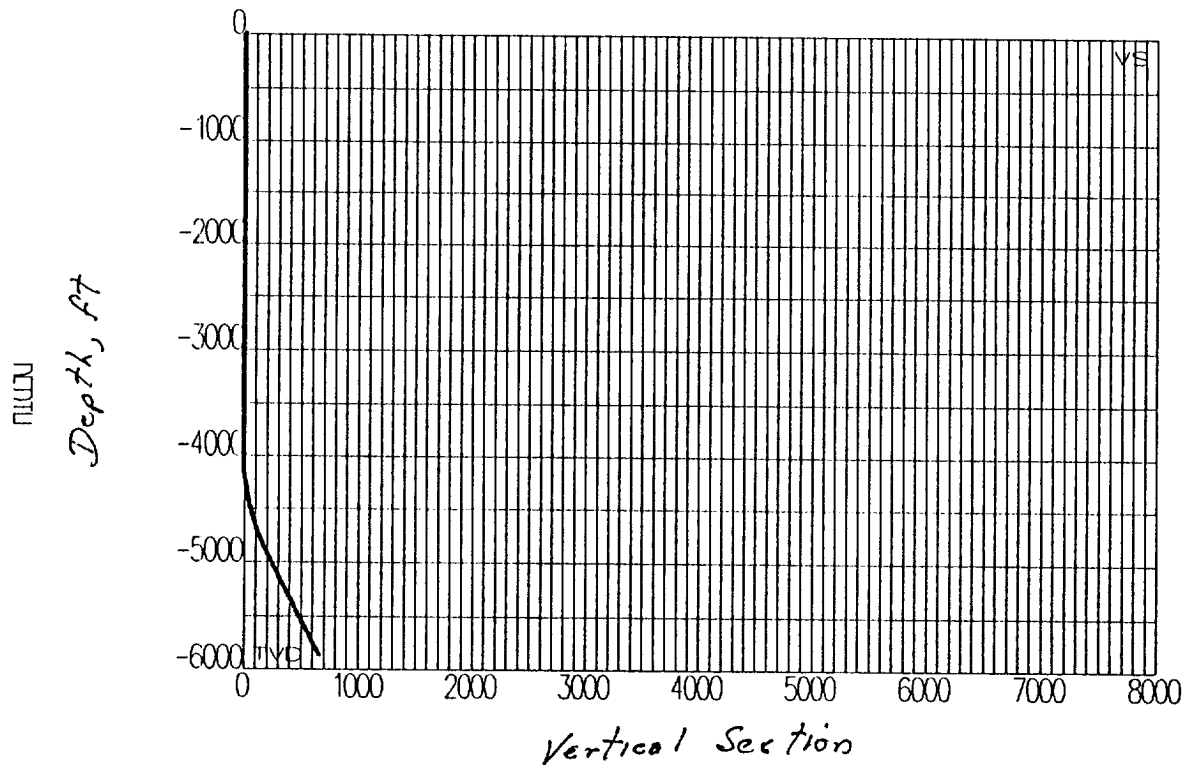
ENGINEERING CHART

Sheet No. _____ of _____
 File _____
 Appn _____
 Date Feb 26, 1986
 By JLH

SUBJECT Atlantic LS #2
16.50' FNL, 1450' FEL Sect 24, 31N, 10W
San Juan County, New Mexico



Atlantic LS #2
1660' FNL, 1450' FEL
Section 24, 31N, 10W
San Juan County, New Mexico



ALIENITO L & L
 Sect 246, 31N, 10W
 1650' FNL, 1450' FEL
 San Juan County, N.M.

Units are FEET

T I	Meas. Depth	Survey Incl Dir	Depth (TVD)	North -South	East -West	Vert. Section	Closure Dist Dir	Dog Leg
	.00	.00 90.00	.00	.00	.00	.00	0 0	.0
	4000.00	.00 90.00	4000.00	.00	.00	.00	0 0	.0
	4100.00	3.00 90.00	4099.95	.00	2.62	2.62	3 90	3.0
	4200.00	5.50 90.00	4199.67	.00	10.03	10.03	10 90	2.5
	4300.00	8.00 90.00	4298.97	.00	21.78	21.78	22 90	2.5
	4400.00	10.50 90.00	4397.66	.00	37.85	37.85	38 90	2.5
	4500.00	13.00 90.00	4495.56	.00	58.22	58.21	58 90	2.5
	4600.00	15.50 90.00	4592.47	.00	82.83	82.83	83 90	2.5
	4700.00	18.00 90.00	4688.22	.00	111.65	111.64	112 90	2.5
	4800.00	20.50 90.00	4782.63	.00	144.61	144.61	145 90	2.5
	4900.00	23.00 90.00	4875.50	.00	181.67	181.66	182 90	2.5
	5000.00	25.50 90.00	4966.67	.00	222.73	222.72	223 90	2.5
	5100.00	25.50 90.00	5056.93	.00	265.79	265.77	266 90	.0
	5168.00	25.50 90.00	5118.30	.00	295.06	295.05	295 90	.0
	5200.00	25.50 90.00	5147.19	.00	308.84	308.82	309 90	.0
	5300.00	25.50 90.00	5237.44	.00	351.89	351.87	352 90	.0
	5400.00	25.50 90.00	5327.70	.00	394.94	394.92	395 90	.0
	5500.00	25.50 90.00	5417.96	.00	437.99	437.97	438 90	.0
	5600.00	25.50 90.00	5508.22	.00	481.04	481.02	481 90	.0
	5700.00	25.50 90.00	5598.48	.00	524.09	524.07	524 90	.0
	5710.00	25.50 90.00	5607.50	.00	528.40	528.37	528 90	.0
	5800.00	25.50 90.00	5688.74	.00	567.14	567.11	567 90	.0
	5900.00	25.50 90.00	5778.99	.00	610.19	610.16	610 90	.0
	6000.00	25.50 90.00	5869.25	.00	653.25	653.21	653 90	.0
	6030.00	25.50 .00	5897.23	6.67	659.92	659.95	660 89118.2	



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Farmington District Office
1235 La Plata Highway
Farmington, New Mexico 87401

IN REPLY REFER TO:

**Attachment to Notice of
Intention to Workover**

Re: Workover

Well: 2 Atlantic LS

CONDITIONS OF APPROVAL

1. If bradenhead remedial cementing work is to be performed, the following intervals should be cemented in addition to the Fruitland top.

A. Ojo Alamo (bottom @ 2181', top @ 2131') At a minimum, place a cement plug from 2231' to 2081' plus 100% excess cement in the 7.0" annular space.

B. Nacimiento (top @ 608') -- At a minimum place a cement plug from 658' to 558' plus 100% excess cement in the 7.0" annular space.

C. Surface casing (set @ 170') -- Perforate at 220' and circulate cement to the surface.