

As of 8-5-63 this well was converted to a WATER INJECTION well and started injecting.

FILE NOTATIONS

Entered in NID File
Entered On S R Sheet _____
Location Map Pinned
Card Indexed
IWR for State or Fee Land _____

Checked by Chief R.L.D.
Copy NID to Field Office
Approval Letter
Disapproval Letter _____

Cause # 45

COMPLETION DATA:

Date Well Completed 4-28-61
OW WW _____ TA _____
GW _____ OS _____ PA _____

Location Inspected _____
Bond released _____
State of Fee Land _____

LOGS FILED

Driller's Log 1-1-61
Electric Logs (No.) 2

E I E-I _____ GR _____ GR-N _____ Micro _____
Lat _____ Mi-L _____ Sonic _____ Others Radiation

UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS: WELL LOG X ELECTRIC LOG 2 FILE X WATER SANDS YES LOCATION INDICATED SUB. REPORT/abd.

* 8-16-63 Subsequent report of converting to water injection well.
 9- 6-63 Acidized Water Injection Well - see file

DATE FILED 12-7-60

LAND: FEE & PATENTED STATE LEASE NO. PUBLIC LEASE NO. INDIAN #4-20-603-246

DRILLING APPROVED: Cause #45 12-16-60

SUDDEN IN: 1-24-61 * 6-8-63

COMPLETE: 2-14-61 PUT TO PRODUCING: 4-28-61 * 8-5-63

INITIAL PRODUCTION: 294 BOPD, 108 BWPD 190 MCF/D * 81 BW @ 450#

GRAVITY A.P.I. 40°

GOR: 646:1

PRODUCING ZONES: 5418'-5584' (gross) * Injecting into 5471'-5604'

TOTAL DEPTH: 5584'

WELL ELEVATION: 4605' G 4623.9' KB 4622.4' DF

DATE ABANDONED:

FIELD: ~~Ratherford~~ Aneth

UNIT: Ratherford

COUNTY: San Juan

WELL NO. NORTH DESERT CREEK #34-1 (RATHERFORD 1-34)1W34 API 43-037-16385

LOCATION 4147' FT. FROM (N) (SS) LINE, 1980' FT. FROM (E) (SW) LINE. SW SE 1/4-1/4 SEC. 1

TWP.	RGE.	SEC.	OPERATOR	TWP.	RGE.	SEC.	OPERATOR:
				41 S	23 E	1	PHILLIPS Oil Co. SHELL OIL COMPANY

GEOLOGIC TOPS:

Electric Log Logs

QUATERNARY	Star Point	Chinle	Molas
Alluvium	Wahweap	Shinarump	Manning Canyon
Lake beds	Masuk	2282' ^{OL}	Mississippian
Pleistocene	Colorado	Moenkopi	Humbug
Lake beds	Sego	2341' ^{TGL}	Brazer
TERTIARY	Buck Tongue	PERMIAN	Pilot Shale
Pliocene	Castlegate	Kaibab	Madison
Salt Lake	Mancos	Coconino	Leadville
Oligocene	Upper	Cutler	Redwall
Norwood	Middle	2387' ^{OL}	DEVONIAN
Eocene	Lower	Hoskinnini	Upper
Duchesne River	Emery	DeChelly	Middle
Uinta	Blue Gate	White Rim	Lower
Bridger	Ferron	Organ Rock	Ouray
Green River	Frontier	Cedar Mesa	Elbert
	Dakota	Halgaite Tongue	McCracken
	Burro Canyon	Phosphoria	Aneth
	Cedar Mountain	Park City	Simonson Dolomite
	Buckhorn	Rico (Goodridge)	Sevy Dolomite
	JURASSIC	Supai	North Point
Wasatch	Morrison	Wolfcamp	SILURIAN
Stone Cabin	Salt Wash	CARBONIFEROUS	Laketown Dolomite
Colton	San Rafeal Gr.	Pennsylvanian	ORDOVICIAN
Flagstaff	Summerville	Oquirrh	Eureka Quartzite
North Horn	Bluff Sandstone	Weber	Pogonip Limestone
Almy	Curtis	Morgan	CAMBRIAN
Paleocene	Entrada	Hermosa	Lynch
Current Creek	Moab Tongue	4475' ^{OL}	Bowman
North Horn	Carmel	Pardox	Tapeats
CRETACEOUS	Glen Canyon Gr.	5456' ^{EL}	Ophir
Montana	Navajo	Ismay	Tintic
Mesaverde	Kayenta	Desert Creek	PRE-CAMBRIAN
Price River	Wingate	Akahl	
Blackhawk	TRIA	Barker Creek	
		Cane Creek	

(SUBMIT IN TRIPLICATE)

Indian Agency Navajo

	1	
	2	

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Allottee Tribal Lands
Lease No. 11-20-603-216

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	<input checked="" type="checkbox"/>	SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

December 6, 1960

North Desert Creek

Well No. 3-1 is located 4147 ft. from N line and 1980 ft. from W line of sec. 1

SW SE 1

(1/4 Sec. and Sec. No.)

13S

(Twp.)

23E

(Range)

S.L.B.M.

(Meridian)

Rutherford

(Field)

San Juan

(County or Subdivision)

Utah

(State or Territory)

The elevation of the derrick floor above sea level is 4605 ft. (approx. ground)

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

1. Drill 17" hole to 80'±.
2. Cement 13-3/8" conductor pipe at 80'± with 75 sacks cement.
3. Drill 12-1/4" hole to 1500'±.
4. Cement 8-5/8", 28#, N-40 casing at 1500'± with 400 sacks cement (circulated).
5. Drill 7-7/8" hole to 5470' and 4-3/4" hole to 5570' (TD) (Desert Creek Zone).
6. Cement 5-1/2", 11#, J-55 casing at 5470' with 200 sacks cement (circulated).
7. Acidize open hole interval 5470-5570 with 6000 gal. acid.
8. Swab out acid water. Set retrievable bridge plug 5460'±.
9. Perforate 4-1/2" hole/ft. 5420-5440.
10. Acidize with 5000 gal. acid.
11. Swab out acid water.
12. Place well on production, establish initial rate.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Shell Oil Company

Address Post Office Box 1200

Farmington, New Mexico

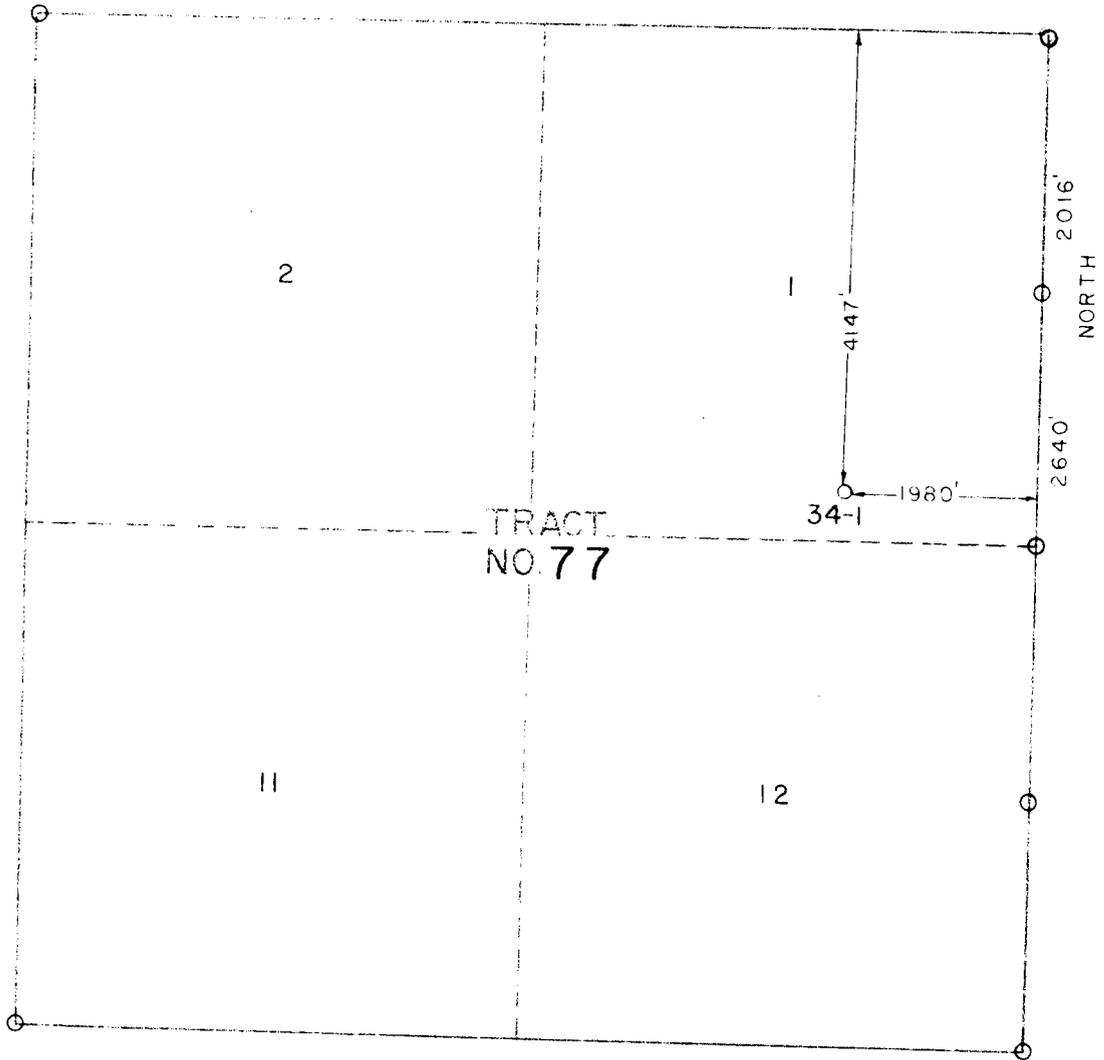
Original Signed By
W. M. MARSHALL

By W. M. Marshall

Title Division Exploitation Engineer

T 41 S

R 23 E

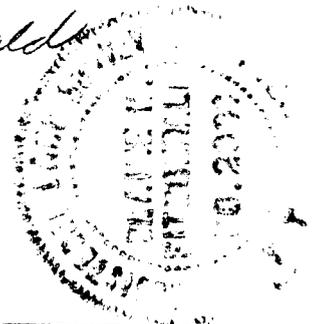


Elevation 4605

○ Found Corner

This is to certify that the above plat was plotted from field notes of a survey made under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Blaine H. Fitzgerald
LS #2334



DRAWN BY J.E.D.

TRACED BY

CHECKED BY B.H.F.

SHELL OIL COMPANY

DATE 12-5-60

SCALE 1" = 2000'

FILE NO Z-20-1360

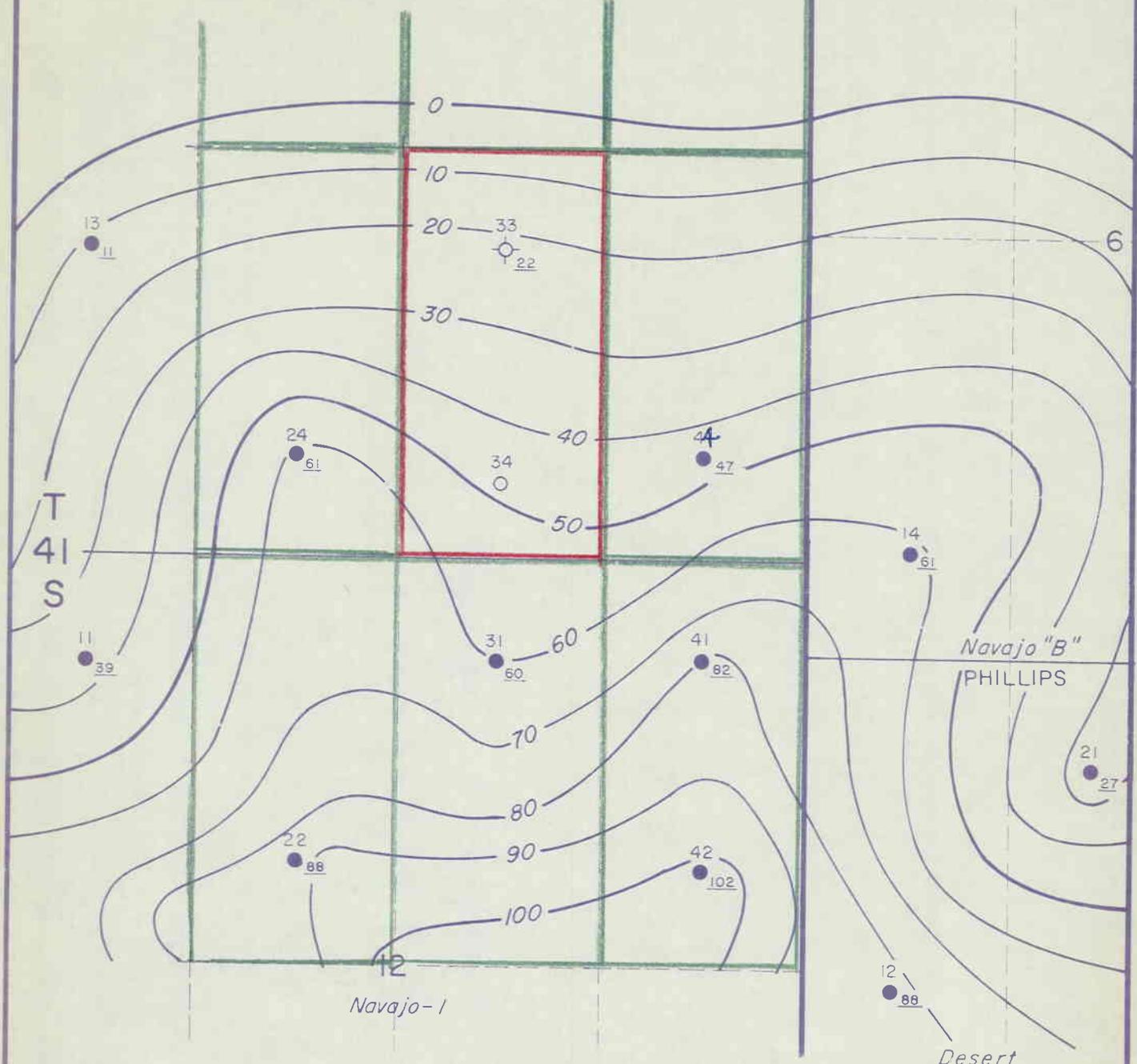
LOCATION OF NORTH DESERT CREEK 34-1
SAN JUAN COUNTY UTAH SEC. 1 T.41 S. R.23 E. S.L.M.

R 23 E

R 24 E

SHELL

SUPERIOR



- Subject drilling unit of Applicant
- Adjoining and cornering drilling units of Applicant
- Adjoining and cornering drilling units of others

LEGEND
 ○ Well Location
 ● Oil Well
 12 Net Pay
 ⊕ Abandoned Well

SHELL OIL COMPANY	PACIFIC COAST AREA FARMINGTON DIVISION	EXPLOITATION DEPT.
-------------------	--	--------------------

RATHERFORD FIELD
 NET PAY
 DESERT CREEK ZONE
 (From Rotherford Engineering)
 (Committee Map)

DATE	SCALE 1" = 1000'
By B.W.S.	
APPROVED W.M.M.	

December 16, 1960

Shell Oil Company
P. O. Box 1200
Farmington, New Mexico

Attention: W. M. Marshall, Div. Exploitation Eng.

Gentlemen:

This is to acknowledge receipt of your notice of intention to drill Well No. North Desert Creek 34-1, which is to be located 4147 feet from the north line and 1980 feet from the east line of Section 1, Township 41 South, Range 23 East, S1EM, San Juan County, Utah.

Please be advised that approval to drill said well is hereby granted in accordance with the Order issued in Cause No. 45, on December 13, 1960.

This approval terminates within 90 days if the above mentioned well has not been spudded in within said period.

Very truly yours,

OIL & GAS CONSERVATION COMMISSION

CLEON B. FREIGHT,
EXECUTIVE SECRETARY

CBF:amg
cc: P. T. McGrath, Dist. Eng.
U. S. Geological Survey

H. L. Counts - OGCC, Moab

(SUBMIT IN TRIPLICATE)

Indian Agency Navajo

	1	
	X	

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Allottee Tribal Lands

Lease No. 14-20-603-246

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	SUBSEQUENT REPORT OF WATER SHUT-OFF
NOTICE OF INTENTION TO CHANGE PLANS	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING
NOTICE OF INTENTION TO TEST WATER SHUT-OFF	SUBSEQUENT REPORT OF ALTERING CASING
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL	SUBSEQUENT REPORT OF REDRILLING OR REPAIR
NOTICE OF INTENTION TO SHOOT OR ACIDIZE	SUBSEQUENT REPORT OF ABANDONMENT
NOTICE OF INTENTION TO PULL OR ALTER CASING	SUPPLEMENTARY WELL HISTORY
NOTICE OF INTENTION TO ABANDON WELL	

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

February 2, 1961

North Desert Creek

Well No. 34-1 is located 4147 ft. from N line and 1980 ft. from E line of sec. 1

SW SE 1

(¼ Sec. and Sec. No.)

41 S

(Twp.)

23 E

(Range)

S1EM

(Meridian)

Ratherford

(Field)

San Juan

(County or Subdivision)

Utah

(State or Territory)

Kelly Bushing

The elevation of the ~~surface~~ above sea level is 4623.9 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Spudded 1-24-61

- 1-24-61 Ran and cemented 13-3/8" conductor pipe at 100' with 100 sacks cement treated with 2% calcium chloride.
- 1-25-61 Drilled to 1466'. Ran and cemented 8-5/8", 28#, H-40 casing at 1463' with to 200 sacks 1:1 Dixmix and 200 sacks cement treated with 2% calcium chloride.
- 1-27-61 Flanged up and waited on cement. Pressure tested casing and BOP with 700 psi, OK.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Shell Oil Company

Address P. O. Box 1200

Farmington, N.M.

Original Signed By
W. M. MARSHALL

By

W. M. Marshall

Title Division Exploitation Engineer

(SUBMIT IN TRIPLICATE)

	1	
	X	

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Indian Agency Navajo

Allottee Tribal Lands

Lease No. 14-20-603-246

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE	X	SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

April 26, 19 61

North Desert Creek

Well No. 34-1 is located 4147 ft. from [N] line and 1960 ft. from [E] line of sec. 1

SW SE 1
(¼ Sec. and Sec. No.)

41S
(Twp.)

23E
(Range)

SLRM
(Meridian)

Ratherford
(Field)

San Juan
(County or Subdivision)

Utah
(State or Territory)

Kelly Bushing

The elevation of the ~~shank~~ above sea level is 4623.9 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Status: Total Depth - 5584'

Casing - 5-1/2" cemented at 5471' with 200 sacks, 4-3/4" open hole 5479' to T.D.

Perforations: 5418-5456

Production - Pumping 108 B/D oil, cut 26%, GOR 1045 from perforations and open hole intervals. (Well has not been officially completed).

Proposed Work:

1. Move in workover rig, pull rods and tubing.
2. Run Lynes packers at 5485-5561'.
3. Acidize between packers with 6000 gal. regular acid.
4. Acidize above top packer with 5000 gal. regular acid.
5. Run tubing and rods, return well to production, establish completion rate.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Shell Oil Company

Address P. O. Box 1200

Farrington, New Mexico

By Original signed by
M. W. McGARRY, JR.

W. M. Marshall
Title Division Exploitation Engineer

SHELL OIL COMPANY

North Desert Creek
 WELL NO. 34-1

DRILLING REPORT
 FOR PERIOD ENDING

Ratherford
 (FIELD)
San Juan, Utah
 (COUNTY)

2-16-61

1
 (SECTION OR LEASE)
T41S R23E
 (TOWNSHIP OR RANCH)

DAY	DEPTHS		REMARKS
	FROM	TO	
			Location: 4147' S and 1980' W of NE Cor. Sec. 1, T. 41 S., R. 23 E., SEEM, San Juan County, Utah. Elevations: DF 4622.4 GR 4610.5 KB 4623.9
1-24 to 1-25	0	240	Spudded 10:00 P.M. 1-24-61. Ran and cemented 3 jts. 13-3/8" conductor pipe at 100' with 100 sacks cement treated with 2% calcium chloride.
1-26 to 1-28	240	1466	Drilled 1226'. Twisted off while drilling at 1062' leaving 9 drill collars and 1 joint of drill pipe in hole, recovered with overshot. Twisted off while drilling at 1466' leaving 9 drill collars and 4 joints of drill pipe in hole, recovered with overshot. Ran and cemented (1449') 8-5/8", 28#, J-55 casing at 1463' with 200 sacks 1-1 Diamix followed by 200 sacks cement treated with 2% calcium chloride. Flanged up and waited on cement. Pressure tested casing and BOP with 700 psi, OK.
1-29 to 2-13	1466	5475	Drilled 4009'. (7-7/8" hole)
2-14	5475	5584	Drilled 109'. (4-3/4" hole)
2-15	5584 (TD)		Ran Induction Electrical Survey and Radioactivity Log. Ran and cemented (854') 5-1/2", 15-1/2#, J-55, ST&C casing on bottom of string and (4602') 5-1/2" 14#, J-55, ST&C casing top of string at 5471' with 200 sacks cement. Final pressure 1500 psi. Ran 4-3/4" bit, pressure tested casing with 1000 psi, OK. Cleaned out to bottom.
2-16	5584		Displaced mud with water. Ran 2-7/8" tubing. Flanged up. Released rig 10:00 A.M. 2-16-61. Checked BOP Daily.

END

Mud Summary
 Wt 9.3-10 #1 gal.
 Vis 35-47 sec.
 WL 6.5-26 cc
 FC 2/32"

CONDITION AT BEGINNING OF PERIOD

HOLE			CASING SIZE	DEPTH SET
SIZE	FROM	TO		
17-1/4	0	100	13-3/8"	100'
12-1/4	100	1466	8-5/8"	1463'
7-7/8	1466	5475	5-1/2"	5471'
4-3/4	5475	5584	--	--
DRILL PIPE SIZES <u>4-1/2</u>				

Contractor: Rutledge Drilling Company
 Contractor Pusher: J. H. Arten
 Drillers: R. L. Scott
 C. G. Desper
 L. Wiesman
 Company Drilling Foreman:
 H. H. Brigham

B. W. Shepard

BWS
 SIGNED

DRILLING REPORT
 FOR PERIOD ENDING

Rutherford
 (FIELD)
San Juan, Utah
 (COUNTY)

3-7-61

1
 (SECTION OR LEASE)
T41S R23E
 (TOWNSHIP OR RANCHO)

DAY	DEPTHS		REMARKS
	FROM	TO	
2-17 to 2-18	5584 (TD)		Moved in and rigged up well pulling unit
2-19			Ran bridge plug on wire line set at 5467'. Pressure tested casing at 700 psi for 15 minutes, OK. Perforated Four jet holes/ft. 5418-5456.
2-20			Ran tubing - acidized with 5000 gal. 15% HCl acid (inhibited). Maximum pressure 2500 psi, average rate 1.5 bbls/min.
2-21			Shutted dry in 3 hrs. Let stand 1 hr. and fluid rose 800'. Swabbed water and increasing amounts of oil, fluid level 400-800' from bottom. Shut down over night.
2-22			Fluid level checked at 1200' from surface. Swabbed 50 bbls. salt water - no oil, fluid level 400-800' from bottom. Shut down over night.
2-23			Fluid level 2400' from surface. Opened casing to pull tubing and well began to flow through casing at 60 bbls/hr., 300 psi on open 2" line. Installed choke and tested well to tank battery. Pressure decreased rapidly and well died after making approximately 60 bbls fluid.
2-24			Pulled tubing - found no obstructions. Re-ran tubing.
2-25			Swabbed and flowed 7 hours, 18 bbls/hr., 30% cut, TP 150, GP 400.
2-26			Swabbed 9 hrs., at 8 bbls/hr., cut 25% (flowed and gassed weakly after each swab run).
2-27 to 3-5			Installed pumping unit, rods and pump.
3-6			Pumped 22 hrs., 204 B/D gross rate, 168 B/D oil rate, 10% cut, 126 MCF/D gas rate, GCR 753.
3-7			Pumped 200 B/D gross, 128 B/D oil, 36% cut, 102 MCF/D gas, GOR 796.

END

CONDITION AT BEGINNING OF PERIOD

HOLE			CASING SIZE	DEPTH SET
SIZE	FROM	TO		
17-1/4	0	100	13-3/8"	100'
12-1/4	100	1466	8-5/8"	1463'
7-7/8	1466	5475	5-1/2"	5471'
4-3/4	5475	5584	-	-
DRILL PIPE SIZES				
4-1/2				

B. W. Shepard

BWS
 SIGNED

SHELL OIL COMPANY

North Desert Creek
 WELL NO. 34-1

DRILLING REPORT
 FOR PERIOD ENDING

1
 (SECTION OR LEASE)
 T11S R23E
 (TOWNSHIP OR RANCHO)

Ratherford
 (FIELD)
San Juan, Utah
 (COUNTY)

4-3-61

DAY	DEPTHS		REMARKS
	FROM	TO	
3-8	5584		Pumped 194 B/D gross, 124 B/D oil, cut 36%, 90 MCF/D gas GOR 724.
	TD		
	5467		
	BPTD		
3-9			Pumped - not tested.
To			
3-12			
3-13			Pumped 157 B/D gross, 109 B/D oil, cut 30.5%, 91 MCF/D, GOR 834.
3-14			Pressure tested tubing - fluid went away without pressure. Bumped pump
To			down and repressured tubing to 850 psi for 10 minutes, OK. Started
3-16			pumping, 44 bbls. in 1-3/4 hours (600 B/D rate) - well stopped
			pumping. Changed pumps. Found cups worn out on old pump.
3-17			Pumped 159 B/D gross, 109 B/D oil, cut 31%, 128 MCF/D, GOR 1160.
3-18			Pumped 4 hours - 23 bbls. gross (138 B/D rate).
3-19			Not tested.
To			
3-20			
3-21			Pulled rods and tubing. Cups on pump torn badly. Seating nipple shows
			signs of pounding.
3-22			Reran rods and tubing.
3-23			Pumped 140 B/D gross, 99 B/D oil, cut 29%, 86 MCF/D, GOR 8730.
3-24			Pumped - not tested.
To			
4-1			
4-2			Pumped 136 B/D gross, 105 B/D oil, cut 23%, 83 MCF/D, GOR 790.
4-3			Pumped - not tested.

CONDITION AT BEGINNING OF PERIOD

HOLE			CASING SIZE	DEPTH SET
SIZE	FROM	TO		
17-1/4	0	100	13-3/8"	100'
12-1/4	100	1466	8-5/8"	1463'
7-7/8	1466	5475	5-1/2"	5471'
4-3/4	5475	5584	"	"
DRILL PIPE SIZES				
4-1/2"				

B. W. Shepard

BWS
 SIGNED

SHELL OIL COMPANY

North Desert Creek
 WELL NO. 34-1

Ratherford
 (FIELD)
San Juan, Utah
 (COUNTY)

DRILLING REPORT
 FOR PERIOD ENDING
4-25-61

1
 (SECTION OR LEASE)
T41S R23E
 (TOWNSHIP OR RANCHO)

DAY	DEPTHS		REMARKS
	FROM	TO	
4-4 To 4-7			Attempted to pull retrievable bridge plug - would not come. Ran tubing with retrieving tool. Circulated off top of plug. Pulled and recovered bridge plug. Ran rods and pump.
4-8			Pumped 202 bbls. gross, 110 bbls. oil, 45.5% cut, 51 MCF/D in 17 hours.
4-9			Pumped 205 B/D gross, 152 B/D oil, cut 26%, 107 MCF/D, GOR 710.
4-10			Pumped 189 B/D gross, 144 B/D oil, cut 24%, 123 MCF/D, GOR 852.
4-11			Pumped 191 B/D gross, 145 B/D oil, cut 24%, 110 MCF/D, GOR 760.
4-12			Pumped 190 B/D gross, 145 B/D oil, cut 23.6%, 119 MCF/D, GOR 820.
4-13			Pumped 156 B/D gross, 127 B/D oil, cut 24%, 117 MCF/D, GOR 920. Fluid level 2400' over pump, CP 158.
4-14 To 4-17			Pumping - not tested.
4-18			Pulled pump - pump strainer partially plugged with rubber. Reran larger pump. On 16-1/2 hour test pumped at rate of 160 B/D gross, 143 B/D oil, cut 12%.
4-19			Pumped 173 B/D gross, 129 B/D oil, cut 25%, 137 MCF/D, GOR 1070.
4-20			Pumped 150 B/D gross, 112 B/D oil, cut 25%, 128 MCF/D, GOR 1140.
4-21			No test.
4-22			Pumped 144 B/D gross, 107 B/D oil, cut 26%, 116 MCF/D, GOR 1080.
4-23			Pumped 145 B/D gross, 108 B/D oil, cut 26%, 113 MCF/D, GOR 1045.
4-24			Pumped 158 B/D gross, 118 B/D oil, cut 25.8%, 151 MCF/D, GOR 1290.
4-25			Pumped 20 hours rate of 237 B/D gross, 175 B/D oil, 146 MCF/D.

CONDITION AT BEGINNING OF PERIOD				
HOLE			CASING SIZE	DEPTH SET
SIZE	FROM	TO		
17-1/4"	0	100	13-3/8"	100'
12-1/4"	100	1466	8-5/8"	1463'
7-7/8"	1466	5475	5-1/2"	5471'
4-3/4"	5475	5584	-	-
DRILL PIPE SIZE <u>4-1/2"</u>				

B. W. Shepard BWS
SIGNED

SHELL OIL COMPANY

North Desert Creek
 WELL NO. 31-1

DRILLING REPORT
 FOR PERIOD ENDING

Ratherford
 (FIELD)
San Juan, Utah
 (COUNTY)

5-1-61

1
 (SECTION OR LEASE)
T41S R23E
 (TOWNSHIP OR RANCHO)

DAY	DEPTHS		REMARKS
	FROM	TO	
4-26			Pulled rods and tubing.
4-27			Set Lynes straddle packers at 5485' and 5562'. Treated above top packer (Bluff zone) with 5000 gal. 15% HCL acid at 3100 psi, rate 3.7 bbls./minute. SIP after 20 minutes 100 psi. Treated between packers (Desert Creek zone) with 6000 gal. 15% HCL acid at 1200 psi, rate 7 bbls./minute. Vacuum immediately after shut in.
4-28			Ran tubing, rods and pump - on production.
4-29			Pumped 18 hours rate of 308 B/D gross, 132 B/D oil, cut 57%, 36 MCF/D, GOR 274.
4-30			Pumped 402 B/D gross, 245 B/D oil, cut 39%, 113 MCF/D, GOR 462.
5-1			Representative Initial Production Pumping 402 B/D gross, 294 B/D oil, cut 27%, 190 MCF/D, GOR 646. Completed 4-28-61.

CONDITION AT BEGINNING OF PERIOD

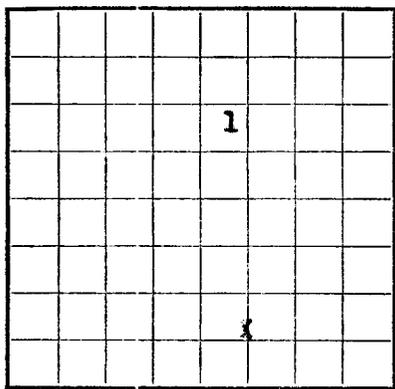
HOLE			CASING SIZE	DEPTH SET
SIZE	FROM	TO		
17-1/4	0	100	13-3/8"	100'
12-1/4	100	1466	8-5/8"	1463'
7-7/8	1466	5475	5-1/2"	5471'
4-3/4	5475	5584	-	-
DRILL PIPE SIZES			4-1/2"	

B. W. Shepard

BWS
 SIGNED

150

U. S. LAND OFFICE Tribal Lands
 SERIAL NUMBER 14-20-003-246
 LEASE OR PERMIT TO PROSPECT _____



LOCATE WELL CORRECTLY

UNITED STATES
 DEPARTMENT OF THE INTERIOR
 GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company Shell Oil Company Address P. O. Box 1209, Harrington, S. D.
 Lessor or Tract Tribal-North Desert Creek Field Rutherford State Utah
 Well No. 14-1 Sec. 1 T. 41 R. 23 Meridian 1st County San Juan
 Location 1147 ft. {N./S.} of Line and 1900 ft. {E./W.} of Line of Sec. 1 Elevation 4624 MB
(Derrick floor relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.
 Original Signed By W. M. MARSHALL
 Signed _____

Date May 3, 1961 Title Div. Exploitation Engineer

The summary on this page is for the condition of the well at above date.

Commenced drilling January 24, 1961. Finished drilling February 14, 1961.

OIL OR GAS SANDS OR ZONES

(gross) (Denote gas by G)

No. 1, from 5116 to 5524 No. 4, from _____ to _____
 No. 2, from _____ to _____ No. 5, from _____ to _____
 No. 3, from _____ to _____ No. 6, from _____ to _____

IMPORTANT WATER SANDS

No. 1, from 500+ to _____ No. 3, from _____ to _____
 No. 2, from _____ to _____ No. 4, from _____ to _____

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated		Purpose
							From-	To-	
<u>13-3/8"</u>	<u>140</u>	<u>140</u>	<u>140</u>	<u>140</u>	<u>140</u>	<u>140</u>	<u>5116</u>	<u>5524</u>	<u>Production</u>
<u>8-5/8"</u>	<u>143</u>	<u>143</u>	<u>143</u>	<u>143</u>	<u>143</u>	<u>143</u>			
<u>5-1/2"</u>	<u>51.71</u>	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>	<u>250</u>			

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
<u>13-3/8"</u>	<u>140</u>	<u>140</u>	<u>displacement</u>	<u>-</u>	<u>-</u>
<u>8-5/8"</u>	<u>143</u>	<u>143</u>	<u>displacement</u>	<u>-</u>	<u>-</u>
<u>5-1/2"</u>	<u>51.71</u>	<u>250</u>	<u>displacement</u>	<u>-</u>	<u>-</u>

PLUGS AND ADAPTERS

Heaving plug—Material _____ Length _____ Depth set _____
 Adapters—Material _____ Size _____

FOLD MARK

FOLD MARK

3/4"	100	100	Displacement	-	-
1/2"	103	100	Displacement	-	-
1/2"	5471	200	Displacement	-	-

PLUGS AND ADAPTERS

Heaving plug—Material _____ Length _____ Depth set _____
 Adapters—Material _____ Size _____

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out

TOOLS USED

Rotary tools were used from 0 feet to 500 feet, and from - feet to - feet
 Cable tools were used from - feet to - feet, and from - feet to - feet

DATES

May 3, 1961 Put to producing April 28, 1961
 The production for the first 24 hours was 108 bwpd, 190 mcf g/d, 294 copd, 200 b46
 emulsion; 27% water; and 73% oil; 73% sediment. Gravity, °Bé. 400 API
 If gas well, cu. ft. per 24 hours _____ Gallons gasoline per 1,000 cu. ft. of gas _____
 Rock pressure, lbs. per sq. in. _____

EMPLOYEES

_____, Driller *McLure Drilling Company*, Driller
 _____, Driller _____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
2282	2341	59	Shinarump
2341	2367	46	Coenkopi
2367	4475	2008	Cutler
4475	5456	981	Hermosa
5456	-	-	Paradox

00

(SUBMIT IN TRIPLICATE)

Indian Agency Navajo

	1	
		X

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Allettee Tribal Lands

Lease No. 14-20-603-246

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF	SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL	SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE	SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING	SUPPLEMENTARY WELL HISTORY	X
NOTICE OF INTENTION TO ABANDON WELL		

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

April 20, 19 61

North Desert Creek
Well No. 34-1 is located 4147 ft. from N line and 1980 ft. from E line of sec. 1

SW SE 1 418 23E SLBM
(¼ Sec. and Sec. No.) (Twp.) (Range) (Meridian)

Ratherford San Juan Utah
(Field) (County or Subdivision) (State or Territory)

The elevation of the ~~surface~~ Kelly Bushing above sea level is 4623.9 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

- 2-15-61 Ran and cemented 5-1/2", 14# & 15.5#, J-55, ST&C casing at 5471' (TD 5584 (7-7/8" hole to 5475', 4-3/4" hole to 5584')) with 200 sacks cement, final pressure 1500 psi. Cleaned out, pressure tested casing with 1000 psi, OK.
- 2-16-61 Displaced mud with water. Flanged up.
- 2-17-61
to Moved in and rigged up pulling unit.
- 2-18-61
- 2-19-61 Ran and set bridge plug at 5467'. Perforated four jet holes/ft. 5418-5456.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced. (Over)

Company Shell Oil Company

Address P. O. Box 1200

Farmington, New Mexico

Original Signed By
W. M. MARSHALL
By W. M. Marshall
Title Division Exploitation Engineer

Navajo

Indian Agency _____

(SUBMIT IN TRIPLICATE)
**UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

Tribal Lands

Allottee 11-20-603-246

Lease No. _____

	1	
	1	

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL _____	SUBSEQUENT REPORT OF WATER SHUT-OFF _____	<input checked="" type="checkbox"/>
NOTICE OF INTENTION TO CHANGE PLANS _____	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING _____	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF _____	SUBSEQUENT REPORT OF ALTERING CASING _____	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL _____	SUBSEQUENT REPORT OF REDRILLING OR REPAIR _____	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE _____	SUBSEQUENT REPORT OF ABANDONMENT _____	<input checked="" type="checkbox"/>
NOTICE OF INTENTION TO PULL OR ALTER CASING _____	SUPPLEMENTARY WELL HISTORY _____	
NOTICE OF INTENTION TO ABANDON WELL _____		

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

May 3, 1961

North Desert Creek
Well No. 34-1 is located 4147 ft. from N line and 1900 ft. from E line of sec. 1

1 (4 Sec. and Sec. No.) 11S 23E S1E1N (Twp.) (Range) (Meridian)
Rutherford San Juan Utah
(Field) (County or Subdivision) (State or Territory)

The elevation of the ~~drill floor~~ above sea level is 4623.9 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Continued from Notices dated April 15 and April 21, 1961

4-15-61 Pump tested well, last rate 237 / min, 17 / oil, 116 / gas.
to gas.
4-20-61

4-27-61 San Lynes straddle packers set at 5115 and 5102'. Treated above top packer with 5000 gal. 15% HCl acid at 310 psi, rate 3.7 gals./min. Treated between packers with 6000 gal. 15% HCl acid at 120 psi, rate 7 b bl./min.

4-28-61 San 2-7/8 tubing to 5100', rods set. 2-7/8 tubing, 2-7/8 casing, 2 3/4 / oil, cut 2 1/2, 190 / gas, 100. Completed 4-28-61.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Hell Oil Company

Address P.O. Box 1200

Deming, New Mexico

Original Signed By
W. M. MARSHALL

By W. M. Marshall

Title Division of Technical Services

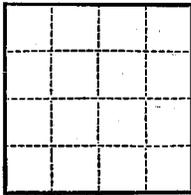
(SUBMIT IN TRIPPLICATE)

Indian Agency Navajo

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Allottee Tulsi

Lease No. 24-20-60-244



SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			
Notice of Intention to Squeeze	X		

Ismay perforations at (INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)
5418-56, Deppen Desert Creek from 5584 to 5604, and convert to water injection. Cortes, Colorado March 21, 19 49

Rutherford Unit (Formerly Shell Oil Co. North Desert Creek 34-1)
Well No. 1-24 is located 4147 ft. from IN line and 1900 ft. from EW line of sec. 1
SW, SE Sec. 1 (1/4 Sec. and Sec. No.) 41S (Twp.) 24E (Range) S18M (Meridian)
Greater Aneth (Field) San Juan (County or Subdivision) Utah (State or Territory)
Kelly Bashing

The elevation of the ~~drill floor~~ above sea level is 4623.9 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Kill well. Pull rods and tubing, set Halliburton DM bridge plug on wire line and set at 5464 (7' above casing shoe). Run Halliburton RTTS tool and set at 5400'. Break-down. Mix 50 sks common cement and squeeze perforations 5418-56 with holding pressure of 1500# maximum, 1000# minimum. Circulate out. Drill cement and bridge plug and new hole from 5584 to 5604 in Desert Creek zone using gelled water. Displace drilling fluid with clean water. Run 2-1/2" Marlex plastic lined tubing with Baker Tension packer at 5461' (5' below squeezed perforations) and convert to Desert Creek zone water injection well.

Present Production: 70 BO, 84 MCF gas, 45 BW in 24 hrs pumping.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company PHILLIPS PETROLEUM COMPANY

Address P. O. Drawer 1150
Cortes, Colorado

By C. M. Boles
C. M. Boles
Title Dist. Supt.



PHILLIPS PETROLEUM COMPANY
P. O. Drawer 1150
Cortez, Colorado

August 15, 1963

Utah Oil & Gas Conservation Commission
310 Newhouse Building
Salt Lake City 11, Utah

Attention: Mr. Cleon B. Feight

Dear Sirs:

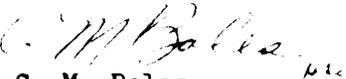
In accordance with Rule E-4 of the Utah General Rules and Regulations, we wish to advise that the following wells located on the Rutherford Unit in San Juan County, Utah, were converted to water injection wells.

Old Well No.	New Well No.	Date Converted	Length of Test	Injection Rate	Injection Pressure
14-43	14W43	8-3-63	24 hrs	914 BW	350#
1-34	1W34	8-5-63	20 hrs	81 BW	450#
6-23	6W23	8-6-63	24 hrs	2300 BW	150#
10-21	10W21	8-8-63	24 hrs	480 BW	2300#
15-21	15W21	8-12-63	24 hrs	280 BW	2250#

Details of the above conversions will be furnished on USGS Form No. 9-331b in the near future.

Very truly yours,

PHILLIPS PETROLEUM COMPANY


C. M. Boles
District Superintendent

bh

Copy to H/C

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Indian Agency NAVAJO
Allottee TRIBAL
Lease No. 14-20-603-246

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	SUBSEQUENT REPORT OF WATER SHUT-OFF
NOTICE OF INTENTION TO CHANGE PLANS	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING
NOTICE OF INTENTION TO TEST WATER SHUT-OFF	SUBSEQUENT REPORT OF ALTERING CASING
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL	SUBSEQUENT REPORT OF REDRILLING OR REPAIR
NOTICE OF INTENTION TO SHOOT OR ACIDIZE	SUBSEQUENT REPORT OF ABANDONMENT
NOTICE OF INTENTION TO PULL OR ALTER CASING	SUPPLEMENTARY WELL HISTORY
NOTICE OF INTENTION TO ABANDON WELL	SUBSEQUENT REPORT TO SQUEEZE ISMAY PERFORATIONS AT 5418-56'

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA) 5504 to 5604 to convert to Water Injection.

Cortez, Colorado August 16 1963

RATHERFORD UNIT (Formerly Ratherford Unit 1-34)

Well No. 1W34 is located 4147 ft. from N line and 1980 ft. from E line of sec. 1

SW, SE. Sec. 1 41S 23E S1EM

(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)

Greater Aneth San Juan Utah

(Field) (County or Subdivision) (State or Territory)

Kelly Bushing

The elevation of the ~~derick~~ derick floor above sea level is 4623.9 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

CONVERTED WELL TO WATER INJECTION (6-8-63 through 8-6-63): Set Bridge Plug and Retrievalmatic Packer, squeezed Ismay perforations 5418-56', pulled packer, drilled cement and bridge plug to OTD 5584', drilled 20' new hole to 5604', ran 2 1/2" tubing string with Marlex Liner and Tension Packer, hooked up for water injection. Started injecting water 8-5-63. Changed well classification from producing oil well to Water Injection Well and changed well number from 1-34 to 1W34. Injecting into Desert Creek open hole 5471-5604'.

Present Production: (Greater Aneth, Baradex formation, Desert Creek Zone)-
Injected 81 BW in 20 hours at 450%.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company PHILLIPS PETROLEUM COMPANY

Address P. O. Drawer 1150

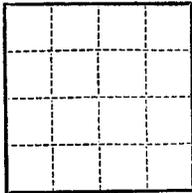
Cortez, Colorado

By C. M. Boles

C. M. Boles

Title District Superintendent

(SUBMIT IN TRIPLICATE)



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Indian Agency _____
NAVAJO
Allottee TRIBAL
Lease No. 14-20-603-246

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO DRILL OR ACIDIZE	X	SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

ANIMAZIA Cortez, Colo. Aug. 16, 1963

Watherford Unit

Well No. 134 is located 4147 ft. from [N] line and 1900 ft. from [E] line of sec. 1
ec. 1 41S 23 T14N
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
Greater Aneth San Juan Utah
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 4623.9 ft.
Kelly Lushing

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Acidize Injection well with 2,000 gallons 15% regular, 300 gallons Sol-block, and 3,000 gallons regular 15% acid.

Present production: (Paradox formation, Bonnet Creek zone): Injected 21 M in 20 hours at 450.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company ANIMAZIA OIL & GAS COMPANY
Address P.O. Drawer 1150
Cortez, Colorado
By C. W. Boles
Title District Superintendent

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN REVERSE SIDE*
(Other instructions on reverse side)

Form Approved
Budget Bureau No. 49-R1424

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 Water Injection		5. LEASE DESIGNATION AND SERIAL NO. 14-20-603-246
2. NAME OF OPERATOR Phillips Petroleum Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo Tribe
3. ADDRESS OF OPERATOR Drawer 1150, Cortez, Colorado 81321		7. UNIT AGREEMENT NAME SW-I-4192
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 4147' FNL, 1980' FEL, SW, SE, Sec. 1		8. FARM OR LEASE NAME Ratherford Unit
14. PERMIT NO.	15. ELEVATIONS (Show whether DF, RT, GR, etc.) 4623.9' KB	9. WELL NO. 1434
		10. FIELD AND POOL, OR WILDCAT Greater Anoth Field
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 1-419-23E, S.L.B.M.
		12. COUNTY San Juan 13. STATE Utah

18. 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 checked="" 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 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.)*

In attempt to improve injectivity, acidize well with 1000 gallons of 15% regular acid.
Present Injection Rate: 492 BHPD at 425#

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

SIGNED C. H. Bolen TITLE District Superintendent DATE 8-21-65

(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**

SUBMIT IN DUPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

~~11-30-603-246~~

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo Tribe

7. UNIT AGREEMENT NAME

SW-I-4192

8. FARM OR LEASE NAME

Rutherford Unit

9. WELL NO.

1473

10. FIELD AND POOL, OR WILDCAT

Greater Aneth Field

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

1-415-238, S.L.B.M.

1.

OIL WELL GAS WELL OTHER **Water Injection**

2. NAME OF OPERATOR

Phillips Petroleum Company

3. ADDRESS OF OPERATOR

Flower 1150, Cortez, Colorado 81321

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

4147' FWL, 1900' FWL, SW, SE, Sec. 1

14. PERMIT NO.

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

4623.9' KB

12. COUNTY

San Juan

13. STATE

Utah

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 COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

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.)*

In attempt to improve injectivity, acidize well with 1000 gallons of 15% regular acid.

Present Injection Rate: 492 BHPD at 425'

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

SIGNED

E. H. Bolan
E. H. BOLAN

TITLE

District Superintendent

DATE

6-21-65

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN 1 PLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

11-20-603-246

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo Tribe

7. UNIT AGREEMENT NAME

S-1-1192

8. FARM OR LEASE NAME

Rutherford Unit

9. WELL NO.

1194

10. FIELD AND POOL, OR WILDCAT

Greater Anoth Field

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

1-418-23E, S.L.B.M.

12. COUNTY OR TERRITORY

San Juan

13. STATE

Utah

1. OIL WELL GAS WELL OTHER **Water Injection**

2. NAME OF OPERATOR

Phillips Petroleum Company

3. ADDRESS OF OPERATOR

Drawer 1190, Cortez, Colorado

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

4347' FNL, 1980' FEL, SW, SE, Sec. 1

14. PERMIT NO.

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

4623.9' KB

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 COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

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.)*

On August 26, 1965 acidized well with 1000 gallons regular acid down tubing. Resumed injection.

**Previous Injection Rates: 492 BOPD at 425%.
Present Injection Rates: 2016 BOPD at 0%.**

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

SIGNED

C. K. Dolan

TITLE

Dist. Supt.

DATE

9-8-65

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRAVERSE SIDE
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.
11-20-603-246

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
Navajo Tribe

7. UNIT AGREEMENT NAME
91-I-1192

8. FARM OR LEASE NAME
Rutherford Unit

9. WELL NO.
1194

10. FIELD AND POOL, OR WILDCAT
Greater Aneth Field

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
1-11-23E, S.L.B.M.

12. COUNTY OR PARISH
San Juan

13. STATE
Utah

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. OIL WELL GAS WELL OTHER **Water Injection**

2. NAME OF OPERATOR
Phillips Petroleum Company

3. ADDRESS OF OPERATOR
Drawer 1150, Cortez, Colorado

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
4147' FNL, 1980' FEL, SW, SE, Sec. 1

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
4623.9' KB

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 checked="" type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <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.)*

On August 26, 1965 acidized well with 1000 gallons regular acid down tubing. Resumed injection.

Previous Injection Rate: 492 BWPD at 425#.
Present Injection Rate: 2016 BWPD at 0#.

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

SIGNED C. H. Boles TITLE Dist. Supt. DATE 9-8-65

(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
 DIVISION OF OIL, GAS, AND MINING
 ROOM 4241 STATE OFFICE BUILDING
 SALT LAKE CITY, UTAH 84114
 (801) 533-5771
 (RULE I-5 & RULE I-4)

FORM NO. DOGM-UIC-1
 (Revised 1982)

IN THE MATTER OF THE APPLICATION OF
PHILLIPS PETROLEUM COMPANY
 ADDRESS P.O. BOX 2920
CASPER, WYOMING ZIP 82602
 INDIVIDUAL PARTNERSHIP X CORPORATION
 FOR ADMINISTRATIVE APPROVAL TO DISPOSE OR
 INJECT FLUID INTO THE 1W34 WELL
 SEC. 1 TWP. 41S RANGE 23E
SAN JUAN COUNTY, UTAH

CAUSE NO. C-3(B)

ENHANCED RECOVERY INJ. WELL	<input checked="" type="checkbox"/>
DISPOSAL WELL	<input type="checkbox"/>
LP GAS STORAGE	<input type="checkbox"/>
EXISTING WELL (RULE I-4)	<input checked="" type="checkbox"/>

APPLICATION

- Comes now the applicant and shows the Corporation Commission the following:
1. That Rule I-5 (g) (iv) authorizes administrative approval of enhanced recovery injections, disposal or LP Gas storage operations.
 2. That the applicant submits the following information.

Lease Name <u>Ratherford Unit</u>	Well No. <u>1W34</u>	Field <u>Greater Aneth</u>	County <u>San Juan</u>
Location of Enhanced Recovery Injection or Disposal Well <u>1W34</u> Sec. <u>1</u> Twp. <u>41S</u> Rge. <u>23E</u>			
New Well To Be Drilled Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Old Well To Be Converted Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Casing Test Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Date <u>5-83</u>	
Depth-Base Lowest Known Fresh Water Within 1/2 Mile <u>Wingate</u> <u>1550'</u>	Does Injection Zone Contain Oil-Gas-Fresh Water Within 1/2 Mile YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	State What Oil & Gas	
Location of Injection Source(s) <u>Desert Creek Paradox I & II</u> <u>San Juan River</u>	Geologic Name(s) and Depth of Source(s) <u>Desert Creek (5567')</u> <u>San Juan River (Surface)</u>		
Geologic Name of Injection Zone <u>Desert Creek I & II</u>	Depth of Injection Interval <u>5471'</u> to <u>5604'</u>		
a. Top of the Perforated Interval; <u>5471'</u>	b. Base of Fresh Water; <u>1550'</u>	c. Intervening Thickness (a minus b) <u>3921'</u>	
Is the intervening thickness sufficient to show fresh water will be protected without additional data? YES NO See Attachment #4			
Lithology of Intervening Zones See Attachment #1			
Injection Rates and Pressures <u>SD 7/1/79</u> Maximum _____ B/D PSI			
The Names and Addresses of Those to Whom Notice of Application Should be Sent.			
<u>Navajo Tribe, Minerals Dept., P.O. Box 146, Window Rock, AZ 86515</u>			
<u>Superior Oil, P.O. Box 4530, The Woodlands, TX 77380</u>			
<u>Texaco Inc., P.O. Box 2100, Denver, CO 80201</u>			
<u>Southland Royalty, 1000 Fort Worth Club Tower, Fort Worth, TX 76102</u>			

State of Wyoming
 County of Natrona

PHILLIPS PETROLEUM COMPANY
 Applicant

Before me, the undersigned authority, on this day personally appeared A. E. Stuart
 known to me to be the person whose name is subscribed to the above instrument, who being by me duly sworn on oath states, that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct.

SUBSCRIBED AND SWORN TO before me this _____ day of _____, 1983
 County of Natrona State of Wyoming
 My commission expires Nov 1 1986

Donald L. Hudson
 Notary Public in and for Natrona Co., Wyoming

(OVER)

INSTRUCTIONS

1. Attach qualitative and quantitative analysis of representative sample of water to be injected and a qualitative and quantitative analysis of the injection formation of water.
2. Attach plat showing subject well and all known oil and gas wells, abandoned, drilling and dry holes within one-half mile, together and with the name of the operator(s).
3. Attach Drillers Log (Form DOGM-UIC-2). (Appropriate Surety must be on file with Conservation Division or appropriate government agencies.)
4. Attach Electric or Radioactivity Log of Subject well (if released).
5. Attach schematic drawing of subsurface facilities including; Size, setting depth, amount of cement used measured or calculated tops of cement surface, intermediate (if any) and production casings; size and setting depth of tubing; type and setting depth of packer; geologic name of injection zone showing top and bottom of injection interval.
6. If the application is for a NEW well the original and six (6) copies of the application and three (3) complete sets of attachments shall be mailed to the Division. For EXISTING well applications (Rule I-4) only ONE copy of the application and ONE complete set of attachments are required to be mailed to the Division.
7. The Division is required to send notice of application to the surface owner of the land within one-half mile of the injection well and to each operator of a producing leasehole within one-half mile of the injection well. List all required names and addresses in the appropriate space provided on the front of this form.
8. Notice that an application has been filed shall be published by the Division in a newspaper of general circulation in the county of publication before the application is approved. The notice shall include the name and address of applicant, location of proposed injection or disposal well, injection zone, injection pressure and volume. If no written objection is received within 15 days from date of publication the application may be approved administratively.
9. A well shall not be used for injection or disposal unless completed machine accounting Form DOGM-UIC-3b is filed by January 31st each year.
10. Approval of this application, if granted, is valid only as long as there is no substantial change in the operations set forth in the application. A substantial operation change requires the approval of a new application.
11. If there is less intervening thickness required by Rule I-5 (b) 4, attach sworn evidence and data.
12. For enhanced recovery projects, information required by Rule I-4 which is common to more than one well, need be reported only once on the application.

CASING AND TUBING DATA

NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
Surface	13-3/8"	100'	100	Surface	Returns
Intermediate	8-5/8"	1463'	400	Surface	Returns
Production	5-1/2"	5471'	200	4887.7	Calculated
Tubing	2-3/8"	5389	Name - Type - Depth of Tubing Packer Baker Loc-Set 5389'		
Total Depth OTD 5604'	Geologic Name - Inj. Zone Desert Creek I & II	Depth - Top of Inj. Interval 5471'	Depth - Base of Inj. Interval 5604'		

(To be filed within 30 days after drilling is completed) 14-20-603-246

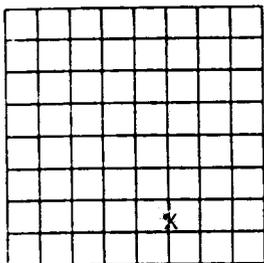
COMPLETION & TEST DATA BY PRODUCING FORMATION
1 2 3

DEPARTMENT OF NATURAL RESOURCES AND ENERGY
DIVISION OF OIL, GAS, AND MINING
Room 4241 State Office Building
Salt Lake City, Utah 84114

API NO. 43-037-16385 LEASE NO. _____
640 Acres
N

COUNTY San Juan SEC. 1 TWP. 41S RGE. 23E
COMPANY OPERATING Phillips Petroleum Company
OFFICE ADDRESS P.O. Box 2920
TOWN Casper STATE ZIP Wyoming 82602
FARM NAME _____ WELL NO. 1W34
DRILLING STARTED 1-24 19 61 DRILLING FINISHED 2-14 19 61
DATE OF FIRST PRODUCTION 4-28-61 COMPLETED _____
WELL LOCATED SW $\frac{1}{4}$ SE $\frac{1}{4}$ _____
4147 FT. FROM N $\frac{1}{4}$ SEC. & 1980 FT. FROM E $\frac{1}{4}$ SEC.
ELEVATION BERRICK FLOOR 4623.9' GROUND 4610.5'

RKB



Locate Well Correctly
and Outline Lease

TYPE COMPLETION

Single Zone _____
Multiple Zone X
Comingled _____

LOCATION EXCEPTION

OIL OR GAS ZONES

Name	From	To	Name	From	To
Ismay	5418	5456			
Desert Creek	5471	5570			

CASING & CEMENT

Casing Set				Ceg. Test	Cement		
Size	Wgt.	Grade	Feet	Psi	Sax	Fillup	Top
13-3/8"	27.1#	H-40	100'	NT	100		Surface
8-5/8"	28#	J-55	1463'	700	400		Surface
5-1/2"	14&15 1/2#	J-55	5471'	1000	200	<u>602.3</u>	<u>4868.7</u>

Open Hole TOTAL DEPTH 5584'

PACKERS SET Baker Loc-Set @ 5389' RKB

NOTE: THIS FORM MUST ALSO BE ATTACHED WHEN FILING PLUGGING FORM DOGM-UIC-6

FORMATION	Desert Creek <u>I+II</u>		
SPACING & SPACING ORDER NO.	40 acre Cause #C-3(B)		
CLASSIFICATION (DISPOSAL WELL, ENHANCED RECOVERY, LP GAS STORAGE)	Enhanced Recovery		
PERFORATED	5471-5604'		
INTERVALS	Open Hole		
ACIDIZED?	4/28/78		
FRACTURE TREATED?	No		

INITIAL TEST DATA

Squeezed Ismay (5418-56) 6/10/63 Deepened to 5604' Converted to Injector

Date	8/5/63		
Oil, bbl./day	--		
Oil Gravity	--		
Gas, Cu. Ft./day	--	CF	CF
Gas-Oil Ratio Cu. Ft./Bbl.	--		
Water-Bbl./day	81		
Pumping or Flowing	Pumping		
CHOKE SIZE	--		
FLOW TUBING PRESSURE	450		

A record of the formations drilled through, and pertinent remarks are presented on the reverse. (use reverse side)

I, the undersigned, being first duly sworn upon oath, state that this well record is true, correct and complete according to the records of this office and to the best of my knowledge and belief.

Telephone 307-237-3791

A.E. Stuart, Area Manager

Name and title of representative of company

Subscribed and sworn before me this _____ day of _____, 19 83

SEP 22 '83

Casper

WELL: 1W34
LOCATION: SWSE S 41-T41S-R23E
FIELD: GREATER ANETH
RESERVOIR: Desert Creek I+II

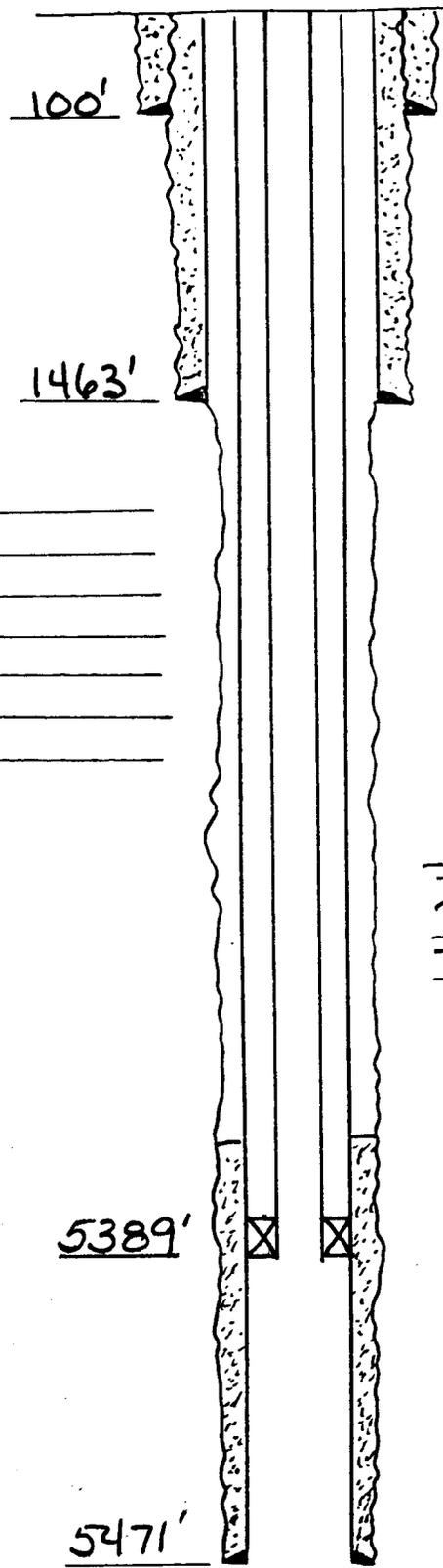
DATE COMPLETION: 6-10-63
PRESENT STATUS: S.I.

RKB 4623.9'
GL 4610.5'

SURFACE CASING: 13 3/8" 27.1#
H-40

INTERMEDIATE CASING: 8 5/8"
28# J-55

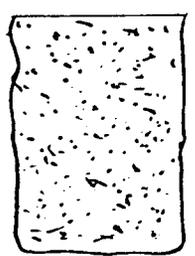
PRODUCTION CASING: 5 1/2"
14 + 15.5# J-55



PERFORATIONS: _____
open hole
5471 - 5604

PACKER: _____
BAKER Loc-set @ 5389'
Tubing: 2 3/8" @ 5389'

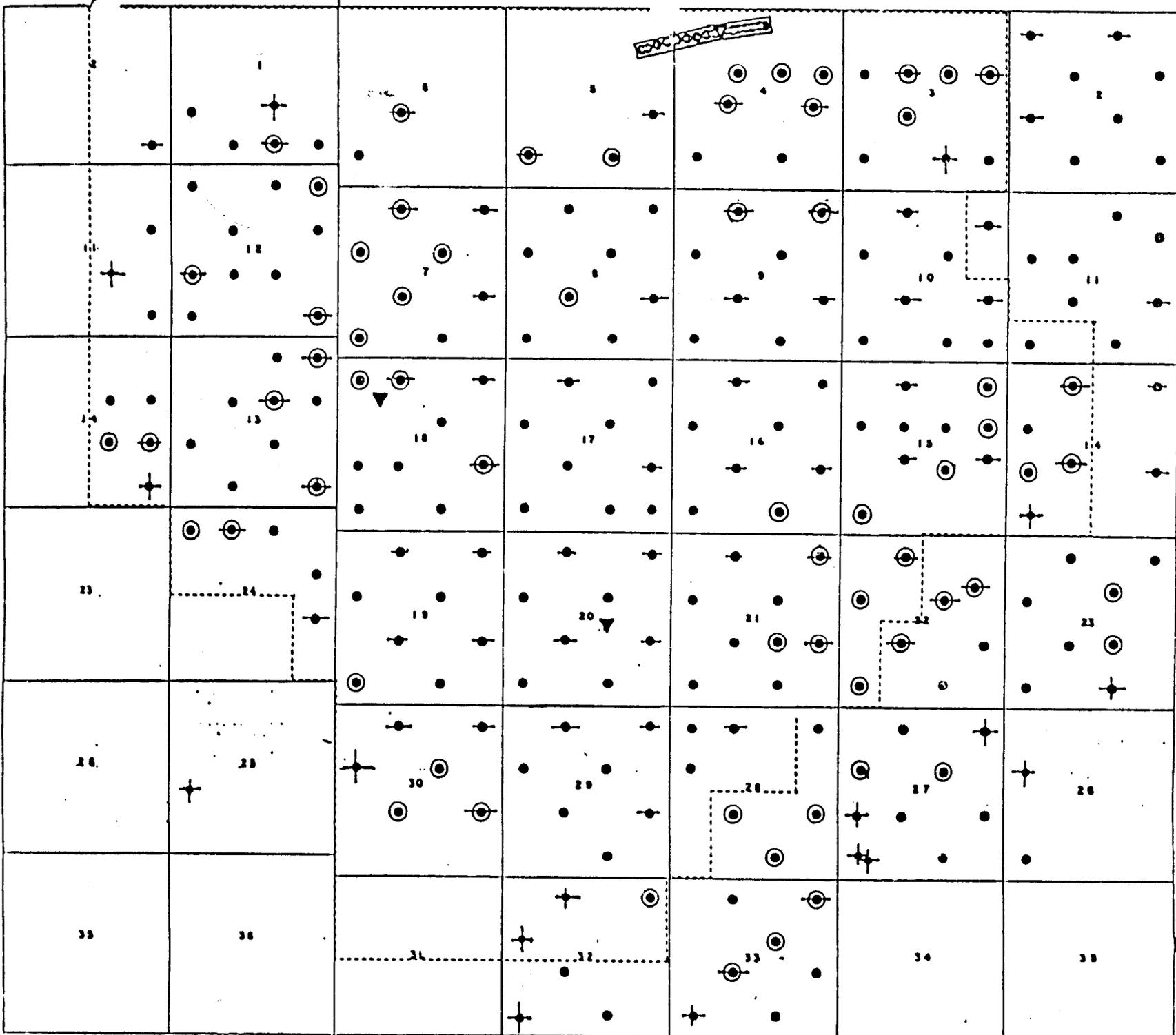
PBTD: _____
OTD: 5604



Phillips Petroleum Company

R-23-E

R-24-E



RATHERFORD UNIT
 SAN JUAN COUNTY, UTAH
 2" = 1 mile
 RCT 3-83

- oil producer
- ◐ water injector
- ◓ water supply
- ▼ domestic water
- ⊕ plugged & abandoned
- shut in well
- unit boundary

WTR INJECTION WELL

CL1-12A (REV. 1964)

CHEMICAL & GEOLOGICAL LABORATORIES

P. O. Box 2794
Casper, Wyoming

WATER ANALYSIS REPORT

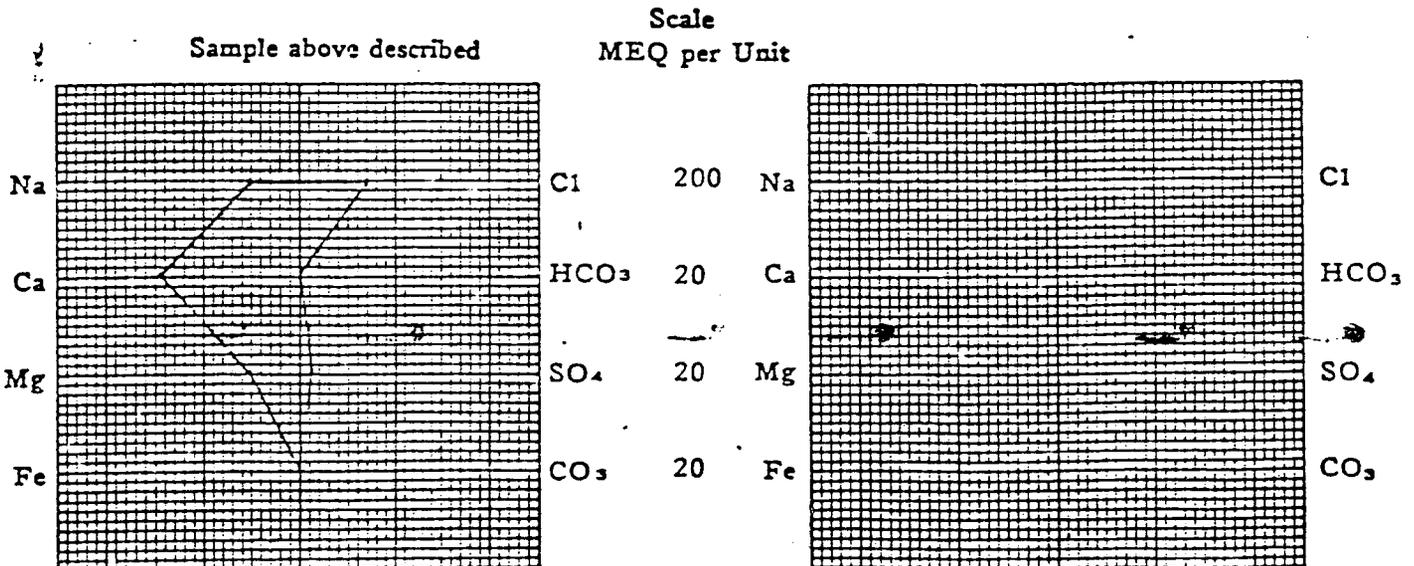
OPERATOR Phillips Petroleum Co. DATE 5-27-83 LAB NO. W30480
 WELL NO. Rutherford Unit LOCATION _____
 FIELD _____ FORMATION _____
 COUNTY San Juan INTERVAL _____
 STATE Utah SAMPLE FROM _____

REMARKS & CONCLUSIONS: Specific gravity @68°F ----- 1.0646
 Oil and grease, mg/l ----- 2.5
 Aluminum (Al), mg/l ----- 0.90
 Iron (Fe), mg/l ----- 0.3
 Total Sulfides, mg/l ----- ND(0.1)

Cations			Anions		
	mg/l	meq/l		mg/l	meq/l
Sodium	24574	1068.99	Sulfate	1190	24.75
Potassium	396	10.14	Chloride	52000	1466.40
Lithium	-	-	Carbonate	0	0.00
Calcium	5982	298.50	Bicarbonate	190	3.12
Magnesium	1419	116.64	Hydroxide	-	-
Iron	-	-	Hydrogen sulfide	-	-
Total Cations		1494.27	Total Anions		1494.27

Total dissolved solids, mg/l ----- 85655
 NaCl equivalent, mg/l ----- 86344
 Observed pH ----- 7.4
 Specific resistance @ 68°F.:
 Observed ----- 0.095 ohm-meters
 Calculated ----- 0.086 ohm-meters

WATER ANALYSIS PATTERN



(Na value in above graphs includes Na, K, and Li)
 NOTE: Mg/l = Milligrams per liter Meq/l = Milligram equivalents per liter
 Sodium chloride equivalent = by Dunlap & Hawthorne calculation from components

CHEMICAL & GEOLOGICAL LABORATORIES

P. O. Box 2794
Casper, Wyoming

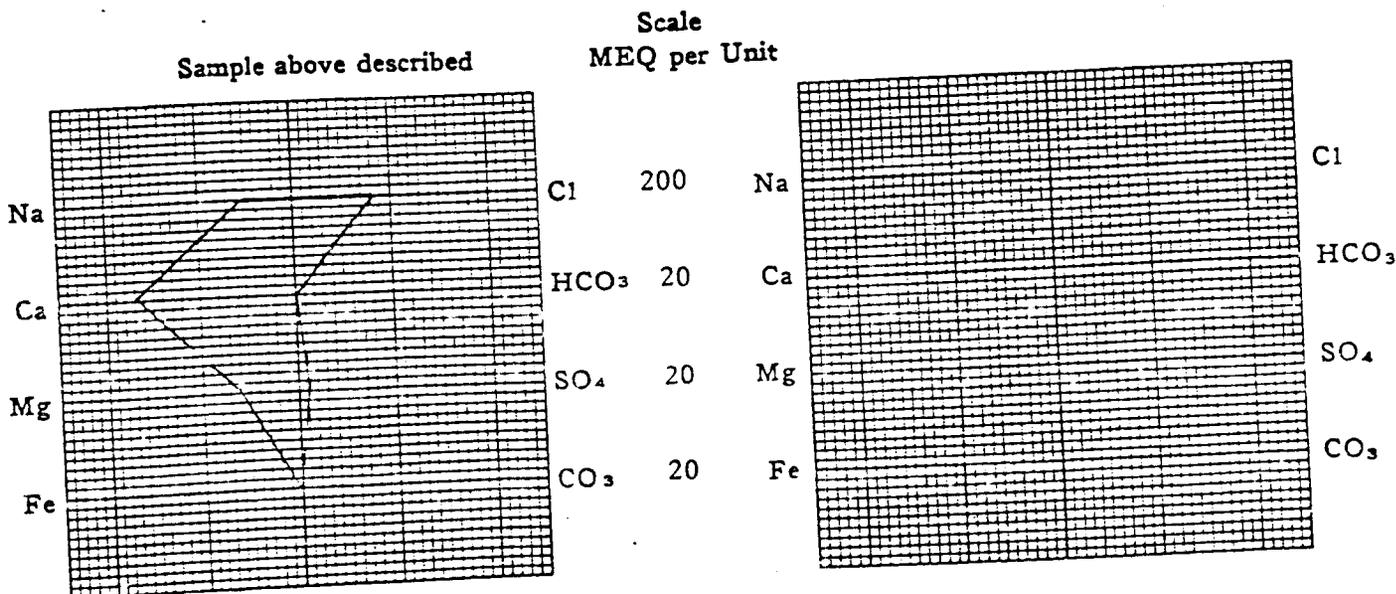
WATER ANALYSIS REPORT

OPERATOR Phillips Petroleum Company DATE 7-22-83 LAB NO. W30636
 WELL NO. Ratherford Unit LOCATION _____
 FIELD _____ FORMATION _____
 COUNTY San Juan INTERVAL _____
 STATE Utah SAMPLE FROM Battery #1 Free water knockout
(7-5-83) @ 10:35
S/N 28568

REMARKS & CONCLUSIONS: _____

Cations			Anions		
	mg/l	meq/l		mg/l	meq/l
Sodium	30147	1311.38	Sulfate	1380	28.70
Potassium	429	10.98	Chloride	63000	1776.60
Lithium	--	--	Carbonate	0	0.00
Calcium	6865	342.56	Bicarbonate	151	2.48
Magnesium	1738	124.86	Hydroxide	--	--
Iron	--	--	Hydrogen sulfide	--	--
Total Cations		1807.78	Total Anions		1807.78
Total dissolved solids, mg/l	103633		Specific resistance @ 68°F.:		
NaCl equivalent, mg/l	104549		Observed	0.087	ohm-meters
Observed pH	7.3		Calculated	0.078	ohm-meters

WATER ANALYSIS PATTERN



(Na value in above graphs includes Na, K, and Li)
 NOTE: Mg/l = Milligrams per liter Meq/l = Milligram equivalents per liter
 Sodium chloride equivalent = by Dunlap & Hawthorne calculation from components

CHECKLIST FOR INJECTION WELL APPLICATION AND FILE REVIEW

Operator: Phillips Well No. Rutherford 1W34
 County: San Juan T 41S R 23E Sec. 1 API# 43-037-16385
 New Well Conversion Disposal Well Enhanced Recovery Well

	YES	NO
UIC Forms Completed	<u>✓</u>	_____
Plat including Surface Owners, Leaseholders, and wells of available record	<u>✓</u>	_____
Schematic Diagram	<u>✓</u>	_____
Fracture Information	<u>✓</u>	_____
Pressure and Rate Control	<u>✓</u>	_____
Adequate Geologic Information	<u>✓</u>	_____

Fluid Source Desert Creek

Analysis of Injection Fluid	Yes <input checked="" type="checkbox"/>	No _____	TDS <u>85655</u>
Analysis of Water in Formation to be injected into	Yes <input checked="" type="checkbox"/>	No _____	TDS <u>103623</u>

Known USDW in area	<u>Wingate</u>	Depth <u>1550</u>
Number of wells in area of review	<u>0</u> Prod.	<u>5</u> P&A <u>1</u>
	Water <u>0</u>	Inj. <u>0</u>

Aquifer Exemption	Yes _____	NA <input checked="" type="checkbox"/>
Mechanical Integrity Test	Yes _____	No <input checked="" type="checkbox"/>
Date _____	Type _____	

Comments: TOC 4868

Reviewed by: *AD*

(November 1983)
(Formerly 9-331)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPlicate
(Other Inquiries
Form 104)

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.)

A. LEASE REGISTRATION AND SERIAL NO.

14-20-603-246

B. IF NEARBY, ALLOTTEE OR TRACT NAME

Navajo

C. UNIT ASSIGNMENT NAME

SW-I-4192

D. FASH OR LEASE NAME

Ratherford Unit

E. WELL NO.

1W34

F. FIELD AND POOL, OR WILDCAT

Greater Aneth

G. SEC., T., R., N., OR S.E. AND SURVEY OR AREA

Sec. 1-T41S-R23E

H. COUNTY OR PARISH

San Juan

I. STATE

Utah

OIL WELL

GAS WELL

OTHER Conversion

2. NAME OF OPERATOR

Phillips Oil Company

3. ADDRESS OF OPERATOR

P.O. Box 2920, Casper, WY 82602

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

4147 FAL

1133' FSE, 1980' FEL, SWSE

14. PERMIT NO.

43-037-16385

15. ELEVATIONS (Show whether SP, ST, OR G.A.)

4624' RKB

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

CELL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT

(Other) Convert to Zone I Producer

(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 space pertinent to this work.)

It is proposed to convert Ratherford Unit #1W34 from a Zone I & II injection well to a Zone I producing well. After plugging back to Zone I, the well will be acidized with 4500 gallons 28% HCL.

Federal approval of this activity is required before commencing operations

A 10' x 8' x 6' fenced pit will be constructed on location in a previously disturbed area. Upon completion of the workover, the pit will be dried and recovered.

- 5-BLM, Farmington, NM
- 2-Utah O&G CC, Salt Lake City, Utah
- 1-P. J. Adamson
- 1-B. Conner, 318B-TRW
- 1-J. R. Weichbrodt
- 1-C. M. Anderson
- 1-File RC

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

BY *John R. Brown*

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

SIGNED

A. E. Stuary

TITLE

Area Manager

DATE

June 6, 1985

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

UTAH DIVISION OF OIL, GAS AND MINING
CASING-BRADENHEAD TEST

OPERATOR: Phillips Petroleum Company

FIELD: Greater Aneth LEASE: Ratherford Unit

WELL # 1 W 34 SEC. 1 TOWNSHIP 41S RANGE 23E

STATE (FED.) FEE DEPTH 5604 TYPE WELL INJ-WTR MAX. INJ. PRESS. _____

TEST DATE 6/17/84

CASING STRING	SIZE	SET AT	CMT	PRESSURE READINGS	REMARKS	FUTURE
<u>SURFACE</u>	<u>1 3/8</u>	<u>100'</u>	<u>100sx</u>		<u>SI</u>	
<u>INTERMEDIATE</u>	<u>8 5/8</u>	<u>1463'</u>	<u>400</u>			
<u>PRODUCTION</u>	<u>5 1/2</u>	<u>5471'</u>	<u>200</u>			
<u>TUBING</u>	<u>2 3/8</u>	<u>5389</u>				
	<u>Baker Loc-Set Pkr at</u>			<u>5389'</u>		

CASING STRING	SIZE	SET AT	CMT	PRESSURE READINGS	REMARKS	FUTURE
<u>SURFACE</u>						
<u>INTERMEDIATE</u>						
<u>PRODUCTION</u>						
<u>TUBING</u>						

CASING STRING	SIZE	SET AT	CMT	PRESSURE READINGS	REMARKS	FUTURE
<u>SURFACE</u>						
<u>INTERMEDIATE</u>						
<u>PRODUCTION</u>						
<u>TUBING</u>						

MONTHLY REPORT OF ENHANCED RECOVERY PROJECT - PART 2 Page 1

MONTHLY MONITORING OF INJECTION WELLS

048304

<u>Well Name</u>	<u>Inj. Press.</u>	<u>Inj. Rate</u>	<u>Annulus Press.</u>	<u>Monthly Inj. Vol.</u>
Ratherford Unit, Well #				
E14W2143-037-16408 ✓	SI	SI		SI
E14W2343-037-16409 ✓	SI	SI		SI
1W2443-037-15839 ✓	1900	269		7532
43-037-16385 1W34 2/5/87 -	Converted to a producing oil well.			
1W4443-037-15840 ✓	0	331		9258
2W4443-037-16386 ✓	2300	256		7166
3W4243-037-16388 ✓	SI	SI		SI
5W4343-037-16392 ✓	1250	37		1024
43-037-15984 6W14 New 2/5/87 ✓	1900	255		6121
6W2343-037-16393 ✓	SI	SI		SI
7W1243-037-15985 ✓	1800	316		8859
7W1443-037-15986 ✓	2200	93		2615
7W2143-037-16394 ✓	2100	25		639
7W3243-037-15988 ✓	2100	81		2281
7W3443-037-15989 ✓	2100	58		1625
7W4143-037-15990 ✓	200	302		8459
7W4343-037-16395 ✓	1600	27		765
8W1443-037-15992 ✓	2150	0		3
8W4343-037-16394 ✓	525	318		8892
9W2143-037-16397 ✓	1425	259		7258
9W2343-037-16398 ✓	0	258		7228

Mobil Oil Corporation

P.O. BOX 5444
DENVER, COLORADO 80217-5444

May 14, 1986

Utah Board of Oil, Gas and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

Attn: R. J. Firth
Associate Director

RECEIVED
MAY 16 1986

DIVISION OF
OIL, GAS & MINING

SUPERIOR OIL COMPANY MERGER

Dear Mr. Firth:

On September 20, 1984, The Superior Oil Company (Superior) became a wholly owned subsidiary of Mobil Corporation. Since January 1, 1985, Mobil Oil Corporation (MOC), another wholly owned subsidiary of Mobil Corporation, has acted as agent for Superior and has operated the Superior-owned properties.

On April 24, 1986, Superior was merged with Mobil Exploration and Producing North America Inc. (MEPNA), which is also a wholly owned subsidiary of Mobil Corporation. MEPNA is the surviving company of the merger.

This letter is to advise you that all properties held in the name of Superior will now be held in the name of MEPNA; and that these properties will continue to be operated by MOC as agent for MEPNA.

Attached is a listing of all wells and a separate listing of injection-disposal wells, Designation of Agent and an organization chart illustrating the relationships of the various companies. If you have any questions or require additional documentation of this merger, please feel free to contact me at the above address or (303) 298-2577.

Very truly yours,



R. D. Baker
Environmental Regulatory Manager

CNE/rd
CNE8661

14-20-603-246A

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 Water Injection Well		5. LEASE DESIGNATION AND SERIAL NO. 14-20-603-246A	
2. NAME OF OPERATOR Phillips Petroleum Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo	
3. ADDRESS OF OPERATOR P.O. Box 2920, Casper, WY 82602		7. UNIT ASSIGNMENT NAME SW-I-4192	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 660' FSL, 661' FEL (SE-SW) A147 FNL 1980 FEL SWSE		8. FARM OR LEASE NAME Ratherford Unit	
14. PERMIT NO. 43-037-16385		9. WELL NO. 1W34	
15. ELEVATIONS (Show whether DP, ST, CR, etc.) 4661' RKB		10. FIELD AND POOL, OR WILDCAT Greater Aneth	
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 1-T41S-R23E	
		12. COUNTY OR PARISH San Juan	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 checked="" 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) _____	
(Other) Convert to Producer <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.)*

It is proposed to convert Ratherford Unit #1W34, an open hole completion, from a Zone I & II water injection well to a Zone I producer. Upon conversion, the well will be acidized with approximately 4400 gallons of 28% HCl Acid and placed on production.

A 10' x 8' x 6' fenced pit will be constructed on location in a previously disturbed area. Upon completion of the workover, the pit will be dried and recovered.

- 5-BLM, Farmington, NM
- /2-Utah O&G CC, Salt Lake City, Utah
- 1-P. J. Adamson
- 1-M. Williams, 302 TRW
- 1-J. R. Reno
- 1-B. J. Murphy
- 1-File RC

NOV 08 1986
DIVISION OF OIL, GAS & MINING

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

SIGNED D. C. Gill TITLE Area Manager DATE November 3, 1986

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____

CONDITIONS OF APPROVAL, IF ANY:

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

11-13-86

John R. Bay

Federal approval of this action is required before commencing operations.

*See Instructions on Reverse Side

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.

**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.)

<p>1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/></p> <p>2. NAME OF OPERATOR Phillips Petroleum Company</p> <p>3. ADDRESS OF OPERATOR P.O. Box 2920, Casper, WY 82602</p> <p>4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 1133' FSQ, 1980' FEL SE SW API# 43-037-16385</p> <p>14. PERMIT NO.</p>	<p>5. LEASO DESIGNATION AND SERIAL NO. 14-20-603-246A</p> <p>6. IF INDIAN, ALLOTTEE OR TRIBE NAME NAVAJO</p> <p>7. UNIT ASSIGNMENT NAME SW-I-4192</p> <p>8. PART OF LEASO NAME Ratherford Unit</p> <p>9. WELL NO. 1-34</p> <p>10. FIELD AND POOL, OR WILDCAT Greater Aneth</p> <p>11. SEC., T., R., E., OR S.E.K. AND SURVEY OR AREA Sec.1-T41S-R23E</p> <p>12. COUNTY OR PARISH 13. STATE San Juan Utah</p>
<p>15. ELEVATIONS (Show whether SP, ST, OR, etc.) 4661' RKB</p>	

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

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

<p>TEST WATER SHUT-OFF <input type="checkbox"/></p> <p>FRACTURE TREAT <input type="checkbox"/></p> <p>SHOOT OR ACIDIZE <input type="checkbox"/></p> <p>REPAIR WELL <input type="checkbox"/></p> <p>(Other) <input type="checkbox"/></p>	<p>PCLL OR ALTER CASING <input type="checkbox"/></p> <p>MULTIPLE COMPLETE <input type="checkbox"/></p> <p>ABANDON* <input type="checkbox"/></p> <p>CHANGE PLANS <input type="checkbox"/></p>	<p>WATER SHUT-OFF <input type="checkbox"/></p> <p>FRACTURE TREATMENT <input type="checkbox"/></p> <p>SHOOTING OR ACIDIZING <input type="checkbox"/></p> <p>(Other) <u>Convert injector to Producer</u> <input checked="" type="checkbox"/></p>	<p>REPAIRING WELL <input type="checkbox"/></p> <p>ALTERING CASING <input type="checkbox"/></p> <p>ABANDONMENT* <input type="checkbox"/></p>
---	--	--	---

(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.)

Dec. 11, 1986 through Jan. 6, 1987

Perforate 5472-80', 5491-96', 5498-5508, 5518-28' and 5536-42'. Acidized w/300 gal 28% HCL. Swbd back load. Ran tbg, pump and rods. Tbg AC at 5395'. RR 1/6/87. Started Pumping 2/2/87.

Injection Before	Shut down
Production After	0 BOPD, 115 BWPD

RECEIVED

AUG 4 1987

DIVISION OF OIL
GAS & MINING

4-BLM, Farmington, NM	1-Chieftain
2-Utah O&G CC, SLC, UT	1-Mobil Oil
1-M. Williams, B'Ville	1-Texaco, Inc.
1-J. Landrum, Denver	1-Chevron USA
1-J. Reno, Cortez	1-File RC

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

SIGNED D. C. Gill TITLE Area Manager DATE 7/27/87

(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

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.

14-20-603-246

6. If Indian, Allottee or Tribe Name

Navajo Tribal

7. If Unit or CA, Agreement Designation

Ratherford Unit
SW-I-4192

8. Well Name and No.

Ratherford Unit #1W34

9. API Well No.

43-037-16385

10. Field and Pool, or Exploratory Area

Greater Aneth

11. County or Parish, State

San Juan, Utah

SUBMIT IN TRIPLICATE

1. Type of Well

Oil Well Gas Well Other *Water Injection*

2. Name of Operator

Phillips Petroleum Company

3. Address and Telephone No.

5525 Hwy 64 NBU 3004, Farmington, NM 87401 (505) 599-3412

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

1133' FSL & 1980' FEL
SW Sec. 1, T41S, R23E

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

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> 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.)

The waterflood response in this area indicated that this well may be a viable producer. The 5 spot pattern implemented in the mid 80's places this well as a producer and not an injector. By the end of the 1st quarter of 1992 we will attempt to reactivate this well as a producer.

RECEIVED

NOV 18 1991

DIVISION OF
OIL GAS & MINING

11-22-91
J.M. Matthews

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

Signed *J.P. Robinson*
P. ROBINSON

Title Sr. Drlg. & Prod. Engr.

Date 11-15-91

(This space for Federal or State office use)

Approved by _____

Title _____

Date _____

Conditions of approval, if any:

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.

*See Instruction on Reverse Side

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

6. Lease Designation and Serial Number 14-20-603-246
7. Indian Allottee or Tribe Name Navajo Tribal
8. Unit or Communitization Agreement Ratherford Unit SW-I-4192
9. Well Name and Number 1-34
10. API Well Number 43-037-16385
11. Field and Pool, or Wildcat Greater Aneth

SUNDRY NOTICES AND REPORTS ON WELLS
 Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter, plugged and abandoned wells.
 Use APPLICATION FOR PERMIT— for such proposals

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other (specify)
2. Name of Operator Phillips Petroleum Company
3. Address of Operator 5525 HWY 64, NBU 3004, Farmington, NM
4. Telephone Number (505) 599-3400
5. Location of Well Footage : 1133' FSL & 1980' FEL QQ, Sec. T., R., M. : SW Sec. 1, T41S R23E County : San Juan State : UTAH

CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA	
NOTICE OF INTENT (Submit in Duplicate)	SUBSEQUENT REPORT (Submit Original Form Only)
<input type="checkbox"/> Abandonment <input type="checkbox"/> New Construction <input type="checkbox"/> Casing Repair <input type="checkbox"/> Pull or Alter Casing <input type="checkbox"/> Change of Plans <input type="checkbox"/> Recompletion <input type="checkbox"/> Conversion to Injection <input type="checkbox"/> Shoot or Acidize <input type="checkbox"/> Fracture Treat <input type="checkbox"/> Vent or Flare <input type="checkbox"/> Multiple Completion <input type="checkbox"/> Water Shut-Off <input type="checkbox"/> Other _____	<input type="checkbox"/> Abandonment * <input type="checkbox"/> New Construction <input type="checkbox"/> Casing Repair <input type="checkbox"/> Pull or Alter Casing <input type="checkbox"/> Change of Plans <input type="checkbox"/> Shoot or Acidize <input type="checkbox"/> Conversion to Injection <input type="checkbox"/> Vent or Flare <input type="checkbox"/> Fracture Treat <input type="checkbox"/> Water Shut-Off <input type="checkbox"/> Other _____
Approximate Date Work Will Start _____	Date of Work Completion _____
	Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form. * Must be accompanied by a cement verification report.

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

ANNUAL STATUS REPORT

A preliminary review of this shut-in well indicates that it may be feasible to reactivate as a producer. This well was shut-in due to communication with Zone II. We will submit our plan of action after completing our feasibility study to reactivate.

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

Name & Signature L. E. Robinson *L. E. Robinson* Title SR. DRILG. & PROD. ENGR Date 2-11-92
 (State Use Only)

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

SUBMIT IN TRIPLICATE

MAY 18 1992

DIVISION OF
OIL GAS & MINING

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator
 Phillips Petroleum Company

3. Address and Telephone No.
 5525 Hwy 64 NBU 3004, Farmington, NM 87401 (505) 599-3412

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
 4147' ENL
 1193' FEL & 1980' FEL
 SW Section 1, T41S, R23E

5. Lease Designation and Serial No.
 14-20-603-246

6. If Indian, Allottee or Tribe Name
 Navajo Tribal

7. If Unit or CA, Agreement Designation
 Ratherford Unit
 SW-I-4192

8. Well Name and No.
 Ratherford Unit #1-34

9. API Well No.
 43-037-16385

10. Field and Pool, or Exploratory Area
 Greater Aneth

11. County or Parish, State
 San Juan, Utah

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

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input checked="" type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> 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.)*

4-26-92 thru 5-12-92
 Steve Mason w/BLM in Farmington was notified on 5-4-92 of our intentions to plug back from Zone II to Ismay on the subject well.
 MI & RU WSU & equipment. NDWH & NU BOP's. COOH w/production string. Cleaned well out to PBTD of 5462'. RU Dowell and pmpd 150 sx Class G cement, first 50 sx RFC, tailed w/100 sx Class G w/fluid loss. Displaced w/37.5 bbls wtr staging cmt. RD Dowell. Drilled to 5461' and circulated clean. RU Petro Wireline and perf'd from 5421'-5431', 5446'-5452' w/2 spf. RU Dowell and spotted 84 gal 28% HCl acid, set pkr @ 5290' and spotted 416 gal 28% HCl, followed by 2500 gal 20% HCl gel acid w/50 ball sealers, displaced w/60 bbls H2O, ave. 2300 psi @ 3 BPM. RD Dowell and left well shut 1 hr. ISIP 500 psi, 5 min. 0 psi. Swabbed well. TIH w/prod. string @5300', SN @ 5455'. ND BOP's and NU WH. Returned well to production.

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

Signed J. E. Robinson Title Sr. Drlg. & Prod. Engr. Date 5-14-92
 (This space for Federal or State office use)

Approved by _____ Title _____ Date _____
 Conditions of approval, if any:

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.

*See Instruction on Reverse Side

PRD219911633



MONTHLY OIL AND GAS PRODUCTION REPORT

Operator name and address:

RECEIVED

JUL 13 1992

Utah Account No. N0772

• P J KONKEL
PHILLIPS PETROLEUM COMPANY
5525 HWY 64 NBU 3004
FARMINGTON NM 87401

Report Period (Month/Year) 5 / 92

DIVISION OF
OIL, GAS & MINING

Amended Report

Well Name			Producing Zone	Days Oper	Production Volume		
API Number	Entity	Location			Oil (BBL)	Gas (MSCF)	Water (BBL)
#4-14	4303716163	06280 41S 24E 4	IS-DC	31	289	105	0
#4-34	4303716164	06280 41S 24E 4	IS-DC	31	241	43	458
#10-34	4303716166	06280 41S 24E 10	DSCR	31	99	11	461
#11-14	4303716167	06280 41S 24E 11	DSCR	30	699	37	13805
NORTH DESERT CREEK 34-1 (13-34)	4303716385	06280 41S 23E 1-34	IS-DC DSCR	18	1	0	5355
NORTH DESERT CR 32-13 (13-32)	4303716406	06280 41S 23E 13	DSCR	Ø	SI	SI	SI
#28-11	4303730446	06280 41S 24E 28	DSCR	31	1264	746	370
#21-33	4303730447	06280 41S 24E 21	DSCR	Ø	SI	SI	SI
#15-42	4303730448	06280 41S 24E 15	DSCR	31	144	289	1606
#15-22	4303730449	06280 41S 24E 15	DSCR	31	301	289	1248
#10-44	4303730451	06280 41S 24E 10	DSCR	31	702	3105	192
#29-31	4303730914	06280 41S 24E 29	DSCR	31	1353	1376	3477
#20-44	4303730915	06280 41S 24E 20	DSCR	31	1946	957	1256
TOTAL					7039	6958	28228

Comments (attach separate sheet if necessary) Well #1-34 Plugged Back to Ismay and Returned to

Production 5/14/92.

DEBRA 7-23-92 ULC-DOG M

I have reviewed this report and certify the information to be accurate and complete.

Date 7/8/92

Pat Konkell
Authorized signature

Telephone 505 599-3452

WELL #	API#	LEASE #	SEC., T, R	LOCATION OF WELL
01W-13	43-037-15838	14-20-603-246A	SEC. 1, T41S, R23E	NW/SW 1980 FSL; 660 FWL
01-14	43-037-31162	14-20-603-246A	SEC. 1, T41S, R23E	SW/SW 660 FSL; 660 FWL
01W-24	43-037-15939	14-20-603-246	SEC. 1, T41S, R23E	SE/SW 651 FSL; 3300 FEL
*01-34	43-037-16385	14-20-603-246A	SEC. 1, T41S, R23E	SW/SE 4147 FNL; 1980 FEL
01W-44	43-037-15840	14-20-603-246A	SEC. 1, T41S, R23E	660 FSL; 661 FEL
02W-44	43-037-16386	14-20-603-246A	SEC. 2, T41S, R23E	SE/SE 810 FNL; 5110' FWL
03-14	43-037-15124	14-20-603-5445	SEC. 3, T41S, R24E	660 FSL; 660 FEL
03-12	43-037-15620	14-20-603-6506	SEC. 3, T41S, R24E	SW/NW 2140 FNL; 660 FWL
03W-42	43-037-16388	14-20-603-6505	SEC. 3, T41S, R24E	SW/NE 1980 FNL; 660 FEL
03-44	43-037-15031	14-20-603-6504	SEC. 3, T41S, R24E	520 FSL; 820 FEL
04-14	43-037-16163	14-20-603-5446	SEC. 4, T41S, R24E	500 FSL; 600 FEL
04-34	43-037-16164	14-20-603-4035	SEC. 4, T41S, R24E	660 FSL; 1980 FEL
05-34	43-037-15983	14-20-603-368	SEC. 5, T41S, R24E	SW/SE 612 FSL; 1990 FEL
05W-43	43-037-16392	14-20-603-368	SEC. 5, T41S, R24E	1400 FSL; 990 FEL
06W-14	43-037-15984	14-20-603-368	SEC. 6, T41S, R24E	SW/SW 660; FSL; 660 FWL
06W-23	43-037-16393	14-20-603-368	SEC. 6, T41S, R24E	1830 FSL; 1895 FWL
07-11	43-037-31163	14-20-603-368	SEC. 7, T41S, R24E	NW/NW 660 FNL; 710 FWL
07W-12	43-037-15985	14-20-603-368	SEC. 7, T41S, R24E	SW/NW 2140 FNL; 585 FWL
07-13	43-037-31164	14-20-603-368	SEC. 7, T41S, R24E	NW/SW 2110 FSL; 740 FWL
07W-14	43-037-15986	14-20-603-368	SEC. 7, T41S, R24E	SW/SW 1065 FSL; 660 FWL
07W-21	43-037-16394	14-20-603-368	SEC. 7, T41S, R24E	710 FNL; 1820 FWL
07-22	43-037-31165	14-20-603-368	SEC. 7, T41S, R24E	SE/NW 1980 FNL; 1980 FWL
07W-23	43-037-15987	14-20-603-368	SEC. 7, T41S, R24E	NE/SW 1980 FSL 1980 FWL
07-24	43-037-31166	14-20-603-368	SEC. 7, T41S, R24E	SE/SW 880 FSL; 2414 FWL
07W-32	43-037-15988	14-20-603-368	SEC. 7, T41S, R23E	SW/NE 1980 FNL; 1980 FEL
07-33	43-037-31167	14-20-603-368	SEC. 7, T41S, R24E	NW/SE 2105 FSL; 1876 FEL
07W-34	43-037-15989	14-20-603-368	SEC. 7, T41S, R24E	710 FSL; 2003 FEL
07W-41	43-037-15990	14-20-603-368	SEC. 7, T41S, R24E	NE/NE 585 FNL; 770 FEL
07W43	43-037-16395	14-20-603-368	SEC. 7, T41S, R24E	2110 FSL; 660 FEL
07-44	43-037-31189	14-20-603-368	SEC. 7, T41S, R24E	SE/SE 737 FSL; 555 FEL
08-12	43-037-15991	14-20-603-368	SEC. 8, T41S, R24E	SW/NW 1909 FNL; 520 FWL
08W-14	43-037-15992	14-20-603-368	SEC. 8, T41S, R24E	745 FSL; 575 FWL
08-21	43-037-15993	14-20-603-368	SEC. 8, T41S, R24E	616 FNL; 1911 FWL
08-23	43-037-15994	14-20-603-368	SEC. 8, T41S, R24E	NE/NW 1920 FSL; 2055 FWL
08-32	43-037-15995	14-20-603-368	SEC. 8, T41S, R24E	SW/NE 1980 FNL; 1980 FEL
08-34	43-037-15996	14-20-603-368	SEC. 8, T41S, R24E	SW/SE 660 FSL; 1980 FEL
08-41	43-037-15997	14-20-603-368	SEC. 8, T41S, R24E	NE/NE 660 FNL; 660 FEL
08W-43	43-037-16396	14-20-603-368	SEC. 8, T41S, R24E	1980 FSL; 660 FEL
09W-23	43-037-16398	14-20-603-5046	SEC. 9, T41S, R24E	NW/SE 1980 FSL; 1980 FWL
09-12	43-037-15126	14-20-603-5045	SEC. 9, T41S, R24E	1865 FNL; 780 FWL
09W-21	43-037-16397	14-20-603-5045	SEC. 9, T41S, R24E	660 FNL; 2080 FWL
09-14A	43-037-15127	14-20-603-5046	SEC. 9, T41S, R24E	710 FSL; 660 FWL
09-32	43-037-16165	14-20-603-4035	SEC. 9, T41S, R24E	1980 FNL; 1980 FEL
09W-41	43-037-16399	14-20-603-4035	SEC. 9, T41S, R24E	660 FNL; 660 FEL
09W-43	43-037-16400	14-20-603-4043	SEC. 9, T41S, R24E	1980 FSL; 660 FEL
10W-23	43-037-16402	14-20-603-4043	SEC. 10, T41S, R24E	1980 FSL; 1980 FWL
10-14	43-037-15713	14-20-603-4043	SEC. 10, T41S, R24E	510 FSL; 710 FWL
10-12	43-037-15712	14-20-603-4043	SEC. 10, T41S, R24E	660 FWL; 1980 FNL
10W-21	43-037-16401	14-20-603-4043	SEC. 10, T41S, R24E	810 FNL; 1980 FWL
10-34	43-037-16166	14-20-603-4037	SEC. 10, T41S, R24E	620 FSL; 1860 FEL
10W-43	43-037-16403	14-20-603-4037	SEC. 10, T41S, R24E	1980 FSL; 550 FEL
11-41	43-037-31544	14-20-603-246A	SEC. 11, T41S, R23E	NE/NE 860 FNL; 350 FEL
11-42W	43-037-15841	14-20-603-246	SEC. 11, T41S, R23E	3290 FNL; 4617 FEL
11-43	43-037-31622	14-20-603-246A	SEC. 11, T41S, R23E	1980 FSL; 660 FEL
11W-44	43-037-15842	14-20-603-246A	SEC. 11, T41S, R23E	SE/SE 660 FSL; 558 FEL
12W-11	43-037-15843	14-20-603-246A	SEC. 12, T41S, R23E	NW/NW 678 FNL; 4620 FEL
12-12	43-037-31190	14-20-603-246A	SEC. 12, T41S, R23E	SW/NW 1850 FNL; 660 FWL
12W-13	43-037-16404	14-20-603-246A	SEC. 12, T41S, R23E	1980 FSL; 4620 FEL
12-14	43-037-15844	NA	SEC. 12, T41S, R23E	660 FNL; 4622 FWL
12-21	43-037-31201	14-20-603-246A	SEC. 12, T41S, R23E	NE/NW 660 FNL; 1980 FWL
12W-22	43-037-15845	14-20-603-246	SEC. 12, T41S, R23E	NA
12-23	43-037-15846	14-20-603-246A	SEC. 12, T41S, R23E	1958 FNL; 3300 FWL
12W-24	43-037-31151	14-20-603-246A	SEC. 12, T41S, R23E	775 FSL; 1980
12-32	43-037-31203	14-20-603-246A	SEC. 12, T41S, R23E	SW/NE 1820 FNL; 1820 FEL
12W-33	43-037-15848	14-20-603-246A	SEC. 12, T41S, R23E	NW/SE 1957 FSL; 1981 FEL
12-34	43-037-31126	14-20-603-246A	SEC. 12, T41S, R23E	SW/SE 675 FSL; 1905 FEL
12-41	43-037-15849	14-20-603-246A	SEC. 12, T41S, R23E	656 FNL; 660 FEL
12W-42	43-037-15850	14-20-603-246A	SEC. 12, T41S, R23E	3275 FSL; 662 FEL

PAID RECEIVED

SEP 13 1993

DIVISION OF OIL, GAS & MINING

PAID

PAID PAID

14-20-603-246

SE NW 1920 FNL 2080 FWL

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

<p>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>		<p>5. LEASE DESIGNATION & SERIAL NO.</p>
<p>1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/></p>		<p>6. IF INDIAN, ALLOTTEE OR TRIBE NAME NAVAJO TRIBAL</p>
<p>2. NAME OF OPERATOR MOBIL OIL CORPORATION</p>		<p>7. UNIT AGREEMENT NAME RATHERFORD UNIT</p>
<p>3. ADDRESS OF OPERATOR P. O. BOX 633 MIDLAND, TX 79702</p>		<p>8. FARM OR LEASE NAME</p>
<p>4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface At proposed prod. zone</p>		<p>9. WELL NO.</p>
<p>14. API NO.</p>		<p>10. FIELD AND POOL, OR WILDCAT GREATER ANETH</p>
<p>15. ELEVATIONS (Show whether DF, RT, GR, etc.)</p>		<p>11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA</p>
<p>12. COUNTY SAN JUAN</p>		<p>13. STATE UTAH</p>

REGISTERED

SEP 13 1993

DIVISION OF
OIL, GAS & MINING

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

NOTICE OF INTENTION TO:

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

SUBSEQUENT REPORT OF:

- | | |
|--|---|
| <p>WATER SHUT-OFF <input type="checkbox"/></p> <p>FRACTURE TREATMENT <input type="checkbox"/></p> <p>SHOOTING OR ACIDIZING <input type="checkbox"/></p> <p>(Other) <u>CHANGE OF OPERATOR</u></p> | <p>REPAIRING WELL <input type="checkbox"/></p> <p>ALTERING CASING <input type="checkbox"/></p> <p>ABANDONMENT* <input type="checkbox"/></p> |
|--|---|
- (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

APPROX. DATE WORK WILL START _____

DATE OF COMPLETION _____

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.)

* Must be accompanied by a cement verification report.

AS OF JULY1, 1993, MOBIL OIL CORPORATION IS THE OPERATOR OF THE RATHERFORD UNIT. ATTACHED ARE THE INDIVIDUAL WELLS.

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

SIGNED Shirley Todd TITLE ENV. & REG TECHNICIAN DATE 9-8-93

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

See Instructions On Reverse Side

Sept 29, 1993

TO: Lisha Cordova - Utah Mining
Oil & Gas

FROM: Janice Easley
BLM Farmington, NM
505 599-6355

Here is copy of Rutherford Unit
Successor Operator,

4 pages including this one.

Let's ratherford Unit (GC)

RECEIVED
BLM

JUL 27 11:44

Navajo Area Office
P. O. Box 1060
Gallup, New Mexico 87305-1060

070 FARMINGTON, NM

ARES/543

JUL 26 1993

MINERALS DEPARTMENT
NO. 188
DATE
BY
3
2
APPROVED
SPE
ALL SUPV.
FILED

Mr. G. D. Cox
Mobil Exploration and
Producing North America, Inc.
P. O. Box 633
Midland, Texas 79702

Dear Mr. Cox:

Enclosed for your information and use is the approved Designation of Operator between the Phillips Petroleum Company and Mobil Exploration and Producing North America, Inc. for the Ratherford Unit.

Please note that all other concerned parties will be furnished their copy of the approved document.

Sincerely,

ACTING Area Director

Enclosure

cc: Bureau of Land Management, Farmington District Office w/enc.
TNN, Director, Minerals Department w/enc.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS

RECEIVED
BLM

DESIGNATION OF OPERATOR

Phillips Petroleum Company is, on the records of the Bureau of Indian Affairs, operator of the Ratherford Unit,
JUN 27 11:44

AREA OFFICE: Window Rock, Arizona
LEASE NO: Attached hereto as Exhibit "A"

070 FARMINGTON, NM

and, pursuant to the terms of the Ratherford Unit Agreement, is resigning as Unit Operator effective July 1, 1993, and hereby designates

NAME: Mobil Exploration and Producing North America Inc., duly elected pursuant to the terms of the Ratherford Unit Agreement,

ADDRESS: P. O. Box 633, Midland, Texas 79702
Attn: G. D. Cox

as Operator and local agent, with full authority to act on behalf of the Ratherford Unit lessees in complying with the terms of all leases and regulations applicable thereto and on whom the authorized officer may serve written or oral instructions in securing compliance with the Operating Regulations (43 CFR 3160 and 25 CFR 211 and 212) with respect to (described acreage to which this designation is applicable):

Attached hereto as Exhibit "A"

Bond coverage under 25 CFR 211, 212 or 225 for lease activities conducted by the above named designated operator is under Bond Number 05202782 (attach copy). Evidence of bonding is required prior to the commencement of operations.

It is understood that this designation of operator does not relieve any lessee of responsibility for compliance with the terms of the leases and the Operating Regulations. It is also understood that this designation of operator does not constitute an assignment of any interest in the leases.

In case of default on the part of the designated operator, the lessees will make full and prompt compliance with all regulations, lease terms, stipulations, or orders of the Secretary of the Interior or his representative.

Attached is the appropriate documentation relevant to this document.

The designated operator agrees to promptly notify the authorized officer of any change in the operatorship of said Ratherford Unit.

Phillips Petroleum Company

June 17, 1993

By: M. B. [Signature] Attorney-in-Fact J.

Mobil Exploration and Producing
North America Inc.

June 11, 1993

By: B. J. Martiny Attorney-in-Fact B.J. MARTINY

[Signature] ACTING AREA DIRECTOR
APPROVED BY TITLE DATE
7/9/93

APPROVED PURSUANT, TO SECRETARIAL REDELEGATION ORDER 209 DM 8 AND 230 DM 3.

This form does not constitute an information collection as defined by 44 U.S.C. 3502 and therefore does not require OMB approval.

EXHIBIT "A"

ATTACHED TO AND MADE A PART OF DESIGNATION OF SUCCESSOR OPERATOR, RATHERFORD UNIT

EXHIBIT "C"

Revised as of September 29, 1992
SCHEDULE OF TRACT PERCENTAGE PARTICIPATION

<u>Tract Number</u>	<u>Description of Land</u>	<u>Serial Number and Effective Date of Lease</u>	<u>Tract Percentage Participation</u>
1	S/2 Sec. 1, E/2 SE/4 Sec. 2, E/4 Sec. 11, and all of Sec. 12, T-41-S, R-23-E, S.L.H. San Juan County, Utah	14-20-603-246-A Oct. 5, 1953	11.0652565
2	SE/4 and W/2 SW/4 Sec. 5, the irregular SW/4 Sec. 6, and all of Sec. 7 and 8, T-41-S, R-24-E, San Juan County, Utah	14-20-603-368 Oct. 26, 1953	14.4159942
3	SW/4 of Sec. 4, T-41-S, R-24-E, San Juan County, Utah	14-20-603-5446 Sept. 1, 1959	.5763826
4	SE/4 Sec. 4, and NE/4 Sec. 9, T-41-S, R-24-E, San Juan County, Utah	14-20-603-4035 March 3, 1958	1.2587779
5	SW/4 of Sec. 3, T-41-S, R-24-E, S.L.H., San Juan County, Utah	14-20-603-5445 Sept. 3, 1959	.4667669
6	NW/4 of Sec. 9, T-41-S, R-24-E, S.L.H., San Juan County, Utah	14-20-603-5045 Feb. 4, 1959	1.0187043
7	NW/4, W/2 NE/4, and SW/4 Sec. 10, SE/4 Sec. 9, T-41-S, R-24-E, San Juan County, Utah	14-20-603-4043 Feb. 18, 1958	3.5097575
8	SW/4 Sec. 9, T-41-S, R-24-E, S.L.H. San Juan County, Utah	14-20-603-5046 Feb. 4, 1959	1.1141679
9	SE/4 Sec. 10 and S/2 SW/4 Sec. 11 T-41-S, R-24-E, San Juan County, Utah	14-20-603-4037 Feb. 14, 1958	2.6186804
10	All of Sec. 13, E/2 Sec. 14, and E/2 SE/4 and N/2 Sec. 24, T-41-S, R-23-E, S.L.H., San Juan County, Utah	14-20-603-247-A Oct. 5, 1953	10.3108861
11	Sections 17, 18, 19 and 20, T-41-S, R-24-E, San Juan County Utah	14-20-603-353 Oct. 27, 1953	27.3389265
12	Sections 15, 16, 21, and NW/4, and W/2 SW/4 Sec. 22, T-41-S, R-24-E, San Juan County, Utah	14-20-603-355 Oct. 27, 1953	14.2819339
13	W/2 Section 14, T-41-S, R-24-E, San Juan County, Utah	14-20-603-370 Oct. 26, 1953	1.8500847
14	N/2 and SE/4, and E/2 SW/4 Sec. 29, NE/4 and E/2 SE/4 and E/2 W/2 irregular Sec. 30, and E/2 NE/4 Sec. 32, T-41-S, R-24-E, San Juan County, Utah	14-20-603-407 Dec. 10, 1953	6.9924969
15	NW/4 Sec. 28, T-41-S, R24-E San Juan County, Utah	14-20-603-409 Dec. 10, 1953	.9416393
16	SE/4 Sec. 3, T-41-S, R-24-E San Juan County, Utah	14-20-0603-6504 July 11, 1961	.5750254
17	NE/4 Sec. 3, T-41-S, R-24-E San Juan County, Utah	14-20-0603-6505 July 11, 1961	.5449292
18	NW/4 Sec. 3, T-41-S, R-24-E San Juan County, Utah	14-20-0603-6506 July 11, 1961	.5482788
19	NE/4 Sec. 4, T-41-S, R24-E San Juan County, Utah	14-20-0603-7171 June 11, 1962	.4720628
20	E/2 NW/4 Sec. 4, T-41-S, R-24-E San Juan County, Utah	14-20-0603-7172 June 11, 1962	.0992482

100% Indian Lands

TOTAL 12,909.74

100.000000

MONTHLY OIL AND GAS DISPOSITION REPORT

OPERATOR NAME AND ADDRESS:

I. B. Sheffield
BRIAN BERRY
~~M E P N A~~ MOBIL
POB 249031 1807A RENTWR F.O. DRAWER G
DALLAS TX 75221-9031 CORTEZ, CO. 81321

UTAH ACCOUNT NUMBER: N7370

REPORT PERIOD (MONTH/YEAR): 7 / 93

AMENDED REPORT (Highlight Changes)

**931006 updated. jfe*

ENTITY NUMBER	PRODUCT	GRAVITY	BEGINNING INVENTORY	VOLUME PRODUCED	DISPOSITIONS				ENDING INVENTORY
		BTU			TRANSPORTED	USED ON SITE	FLARED/VENTED	OTHER	
05980	OIL			177609	177609	0			
	GAS			72101	66216	5885			
11174	OIL								
	GAS								
	OIL								
	GAS								
	OIL								
	GAS								
	OIL								
	GAS								
	OIL								
	GAS								
	OIL								
	GAS								
TOTALS				249710	243825	5885			

RECEIVED

SEP 13 1993

DIVISION OF OIL, GAS & MINING

COMMENTS: *PLEASE NOTE ADDRESS change. Mobil ~~ASU~~ PRODUCTION REPORTS will be compiled and sent from the Cortez, Co. office IN THE FUTURE.*

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

Name and Signature: *Iwell B Sheffield*

Date: 9/5/93
Telephone Number: 303.565.2212
244.658.2528

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

MONTHLY OIL AND GAS PRODUCTION REPORT

OPERATOR NAME AND ADDRESS:

ACCOUNT NUMBER: N0772

P J KONKEL
PHILLIPS PETROLEUM COMPANY
5525 HWY 64 NBU 3004
FARMINGTON NM 87401

RECEIVED

AUG 16 1993

REPORT PERIOD (MONTH/YEAR):

6 / 93

DIVISION OF
OIL, GAS & MINING

AMENDED REPORT (Highlight Changes)

Well Name			Producing Zone	Well Status	Days Oper	Production Volumes		
API Number	Entity	Location				OIL(BBL)	GAS(MCF)	WATER(BBL)
#21-23								
4303713754	06280	41S 24E 21	DSCR	POW	29	1374	883	58
#3-44								
4303715031	06280	41S 24E 3	DSCR	POW	30	111	94	2905
#3-14								
4303715124	06280	41S 24E 3	DSCR	POW	30	67	23	302
#9-12								
4303715126	06280	41S 24E 9	DSCR	POW	30	112	654	17363
#9-14								
4303715127	06280	41S 24E 9	DSCR	POW	30	201	315	423
#28-12								
4303715336	06280	41S 24E 28	PRDX	POW	29	112	47	2428
#29-12								
4303715337	06280	41S 24E 29	PRDX	POW	29	56	0	672
#29-32								
4303715339	06280	41S 24E 29	DSCR	POW	29	1402	287	2224
#29-34								
4303715340	06280	41S 24E 29	DSCR	POW	29	757	48	0
#30-32								
4303715342	06280	41S 24E 30	DSCR	POW	29	588	1049	3744
#3-12								
4303715620	06280	41S 24E 3	DSCR	POW	30	268	11	363
#9-34								
4303715711	06280	41S 24E 9	DSCR	POW	30	45	46	9800
#10-12								
4303715712	06280	41S 24E 10	DSCR	POW	30	45	23	1088
TOTALS						5138	3480	41370

COMMENTS: Effective July 1, 1993, Phillips Petroleum Company has sold its interest in the Ratherford Unit to Mobil Exploration and Producing U.S., Incorporated, P. O. Box 633, Midland, Texas 79702. Mobil assumed operations on July 1, 1993.

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

Date: 8/11/93

Name and Signature: PAT KONKEL

Pat Konkell

Telephone Number: 505 599-3452

Division of Oil, Gas and Mining
PHONE CONVERSATION DOCUMENTATION FORM

Route original/copy to:

Well File _____

(Location) Sec ___ Twp ___ Rng ___
(API No.) _____

Suspense
(Return Date) _____
(To - Initials) _____

Other
OPERATOR CHANGE

1. Date of Phone Call: 10-6-93 - Time: 9:30

2. DOGM Employee (name) L. CORDOVA (Initiated Call
Talked to:
Name GLEN COX (Initiated Call - Phone No. (915) 688-2114
of (Company/Organization) MOBIL

3. Topic of Conversation: OPERATOR CHANGE FROM PHILLIPS TO MOBIL "RATHERFORD UNIT".
(NEED TO CONFIRM HOW OPERATOR WANTS THE WELLS SET UP - MEPNA AS PER BIA APPROVAL
OR MOBIL OIL CORPORATION AS PER SUNDRY DATED 9-8-93?)

4. Highlights of Conversation: _____
MR. COX CONFIRMED THAT THE WELLS SHOULD BE SET UNDER ACCOUNT N7370/MEPNA AS
PER BIA APPROVAL, ALSO CONFIRMED THAT PRODUCTION & DISPOSITION REPORTS WILL NOW
BE HANDLED OUT OF THEIR CORTEZ OFFICE RATHER THAN DALLAS.
MEPNA-
PO DRAWER G
CORTEZ, CO 81321
(303)565-2212
*ADDRESS CHANGE AFFECTS ALL WELLS CURRENTLY OPERATED BY MEPNA, CURRENTLY
REPORTED OUT OF DALLAS (MCELMO CREEK).

Division of Oil, Gas and Mining
OPERATOR CHANGE WORKSHEET

Routing:

1	VLC/17-54
2	DES/58-FILE
3	VLC
4	RJFY
5	FILE
6	PL

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

- Change of Operator (well sold) Designation of Agent
 Designation of Operator Operator Name Change Only

The operator of the well(s) listed below has changed (EFFECTIVE DATE: 7-1-93)

TO (new operator)	<u>M E P N A</u>	FROM (former operator)	<u>PHILLIPS PETROLEUM COMPANY</u>
(address)	<u>PO DRAWER G</u>	(address)	<u>5525 HWY 64 NBU 3004</u>
	<u>CORTEZ, CO 81321</u>		<u>FARMINGTON, NM 87401</u>
	<u>GLEN COX (915)688-2114</u>		<u>PAT KONKEL</u>
phone	<u>(303) 565-2212</u>	phone	<u>(505) 599-3452</u>
account no.	<u>N7370</u>	account no.	<u>N 0772(A)</u>

Well(s) (attach additional page if needed): ***RATHERFORD UNIT (NAVAJO)**

Name: **SEE ATTACHED**	API: <u>43037-16385</u>	Entity: _____	Sec. _____	Twp. _____	Rng. _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec. _____	Twp. _____	Rng. _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec. _____	Twp. _____	Rng. _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec. _____	Twp. _____	Rng. _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec. _____	Twp. _____	Rng. _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec. _____	Twp. _____	Rng. _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec. _____	Twp. _____	Rng. _____	Lease Type: _____

OPERATOR CHANGE DOCUMENTATION

- Sec 1. (Rule R615-8-10) Sundry or other legal documentation has been received from former operator (Attach to this form). *(Reg. 8-20-93) (6/93 Prod. Rpt. 8-16-93)*
- Sec 2. (Rule R615-8-10) Sundry or other legal documentation has been received from new operator (Attach to this form). *(Reg. 8-31-93) (Rec'd 9-14-93)*
- N/A 3. The Department of Commerce has been contacted if the new operator above is not currently operating any wells in Utah. Is company registered with the state? (yes/no) _____ If yes, show company file number: _____.
- Sec 4. (For Indian and Federal Wells ONLY) The BLM has been contacted regarding this change (attach Telephone Documentation Form to this report). Make note of BLM status in comments section of this form. Management review of Federal and Indian well operator changes should take place prior to completion of steps 5 through 9 below.
- Sec 5. Changes have been entered in the Oil and Gas Information System (Wang/IBM) for each well listed above. *(O&G wells 10-6-93) (wiw's 10-26-93)*
- Sec 6. Cardex file has been updated for each well listed above. *(O&G wells 10-6-93) (wiw's 10-26-93)*
- Sec 7. Well file labels have been updated for each well listed above. *(O&G wells 10-6-93) (wiw's 10-26-93)*
- Sec 8. Changes have been included on the monthly "Operator, Address, and Account Changes" memo for distribution to State Lands and the Tax Commission. *(10-6-93)*
- Sec 9. A folder has been set up for the Operator Change file, and a copy of this page has been placed there for reference during routing and processing of the original documents.

ENTITY REVIEW

See 1. (Rule R615-8-7) Entity assignments have been reviewed for all wells listed above. Were entity changes made? (yes/no) no (If entity assignments were changed, attach copies of Form 6, Entity Action Form).

N/A 2. State Lands and the Tax Commission have been notified through normal procedures of entity changes.

BOND VERIFICATION (Fee wells only)

See / N/A 1. (Rule R615-3-1) The new operator of any fee lease well listed above has furnished a proper bond.

 2. A copy of this form has been placed in the new and former operators' bond files.

 3. The former operator has requested a release of liability from their bond (yes/no) . Today's date 19 . If yes, division response was made by letter dated 19 .

LEASE INTEREST OWNER NOTIFICATION RESPONSIBILITY

N/A 1. (Rule R615-2-10) The former operator/lessee of any fee lease well listed above has been notified by letter dated 19 , of their responsibility to notify any person with an interest in such lease of the change of operator. Documentation of such notification has been requested.

N/A 2. Copies of documents have been sent to State Lands for changes involving State leases.

FILMING

 1. All attachments to this form have been microfilmed. Date: 11-17 19 93 .

FILING

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

See 2. The original of this form and the original attachments have been filed in the Operator Change file.

COMMENTS

931006 BIA/Btm Approved 7-9-93.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
APR 10 1995

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.

SUBMIT IN TRIPLICATE

1. Type of Well
 Oil Well Gas Well Other **INJECTOR**

2. Name of Operator **Mobil Exploration & Producing U.S. Inc.**
as Agent for Mobil Producing TX & NM Inc.

3. Address and Telephone No.
P.O. Box 633, Midland, TX 79702 915/688-2585

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
**SW/SE 4147 FNL; 1980 FEL
 SEC. 1, T41S, R23E**

5. Lease Designation and Serial No.
14-20-603-246A

6. If Indian, Allottee or Tribe Name
NAVAJO TRIBAL

7. If Unit or CA, Agreement Designation
RATHERFORD UNIT

8. Well Name and No.
RATHERFORD 1-34

9. API Well No.
43-037-16385

10. Field and Pool, or exploratory Area
GREATER ANETH

11. County or Parish, State
SAN JUAN UT

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

TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other TA	<input type="checkbox"/> 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.)*

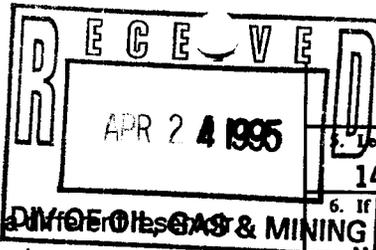
03-07-95 POH W/ EQUIP. SET CIBP @ 5400' CIRC HOLE W/ PKR FLUID. TESTED TO 500#.

14. I hereby certify that the foregoing is true and correct
 Signed Shelley Robertson Title **ENV. & REG TECHNICIAN** Date **4-7-95**

(This space for Federal or State office use)
 Approved by _____ Title _____ Date _____
 Conditions of approval, if any: _____

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.

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 well. Use "APPLICATION FOR PERMIT - " for such proposals

5. Lease Designation and Serial No.
14-20-603-246A
6. If Indian, Allottee or Tribe Name

NAVAJO TRIBAL

SUBMIT IN TRIPLICATE

7. If Unit or CA, Agreement Designation
RATHERFORD UNIT

1. Type of Well

Oil Well Gas Well Other **TA**

8. Well Name and No.

RATHERFORD 1-34

2. Name of Operator **Mobil Exploration & Producing U.S. Inc.
as Agent for Mobil Producing TX & NM Inc.**

9. API Well No.

43-037-16385

3. Address and Telephone No.
P.O. Box 633, Midland, TX 79702 915/688-2585

10. Field and Pool, or exploratory Area

GREATER ANETH

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

**SW/SE 4147 FNL; 1980 FEL
SEC. 1, T41S, R23E**

11. County or Parish, State

SAN JUAN UT

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

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other TA
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> 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.)*

JUSTIFICATION:

The Ratherford Unit 1-34 was TA'd to save the well for possible horizontal completion in Desert Creek 1 zone, or use as a DeChelley water supply well. It may be 3 years before this well is active.

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

Signed Shuley Robertson

Title **ENV. & REG TECHNICIAN**

Date **4-20-95**

(This space for Federal or State office use)

Approved by _____

Title _____

Date _____

Conditions of approval, if any:

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.

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING
 355 West North Temple, 3 Triad, Suite 350, Salt Lake City, UT 84180-1203

MONTHLY OIL AND GAS PRODUCTION REPORT

OPERATOR NAME AND ADDRESS:

C/O MOBIL OIL CORP
 M E P N A
 PO DRAWER G
 CORTEZ CO 81321

UTAH ACCOUNT NUMBER: N7370

REPORT PERIOD (MONTH/YEAR): 6 / 95

AMENDED REPORT (Highlight Changes)

Well Name			Producing Zone	Well Status	Days Oper	Production Volumes		
API Number	Entity	Location				OIL(BBL)	GAS(MCF)	WATER(BBL)
4-14								
4303716163	06280	41S 24E 4	IS-DC					
4-34								
4303716164	06280	41S 24E 4	IS-DC					
#10-34								
4303716166	06280	41S 24E 10	DSCR					
#11-14								
4303716167	06280	41S 24E 11	DSCR					
RATHERFORD UNIT 1-34								
4303716385	06280	41S 23E 1	IS-DC					
NORTH DESERT CR 32-13 (13-32)								
4303716406	06280	41S 23E 13	DSCR					
RATHERFORD UNIT 28-11								
4303730446	06280	41S 24E 28	DSCR					
#15-42								
4303730448	06280	41S 24E 15	DSCR					
#15-22								
4303730449	06280	41S 24E 15	DSCR					
#10-44								
4303730451	06280	41S 24E 10	DSCR					
RATHERFORD UNIT 29-31								
4303730914	06280	41S 24E 29	DSCR					
RATHERFORD UNIT 20-44								
4303730915	06280	41S 24E 20	DSCR					
#19-42								
4303730916	06280	41S 24E 19	DSCR					
TOTALS								

COMMENTS: _____

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

Date: _____

Name and Signature: _____

Telephone Number: _____

Division of Oil, Gas and Mining
PHONE CONVERSATION DOCUMENTATION FORM

Route original/copy to:

Well File _____

(Location) Sec ___ Twp ___ Rng ___
(API No.) _____

Suspense
(Return Date) _____
(To - Initials) _____

Other
OPER NM CHG _____

1. Date of Phone Call: 8-3-95 Time: _____

2. DOGM Employee (name) L. CORDOVA (Initiated Call)
Talked to:

Name R. J. FIRTH (Initiated Call) - Phone No. () _____
of (Company/Organization) _____

3. Topic of Conversation: M E P N A / N7370

4. Highlights of Conversation: _____

OPERATOR NAME IS BEING CHANGED FROM M E P N A (MOBIL EXPLORATION AND PRODUCING NORTH AMERICA INC) TO MOBIL EXPLOR & PROD. THE NAME CHANGE IS BEING DONE AT THIS TIME TO ALLEVIATE CONFUSION, BOTH IN HOUSE AND AMONGST THE GENERAL PUBLIC. *SUPERIOR OIL COMPANY MERGED INTO M E P N A 4-24-86 (SEE ATTACHED).

Division of Oil, Gas and Mining
OPERATOR CHANGE WORKSHEET

Routing:	
1- LVC	7-PL ✓
2-LWP ✓	8-SJ ✓
3- DTS	9-FILE ✓
4-VLC ✓	
5-RJF ✓	
6-LWP ✓	

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

- Change of Operator (well sold) Designation of Agent
 Designation of Operator Operator Name Change Only

The operator of the well(s) listed below has changed (EFFECTIVE DATE: 8-2-95)

TO (new operator) <u>MOBIL EXPLOR & PROD</u>	FROM (former operator) <u>M E P N A</u>
(address) <u>C/O MOBIL OIL CORP</u>	(address) <u>C/O MOBIL OIL CORP</u>
<u>PO DRAWER G</u>	<u>PO DRAWER G</u>
<u>CORTEZ CO 81321</u>	<u>CORTEZ CO 81321</u>
phone <u>(303) 564-5212</u>	phone <u>(303) 564-5212</u>
account no. <u>N7370</u>	account no. <u>N7370</u>

Well(s) (attach additional page if needed):

Name: <u>** SEE ATTACHED **</u>	API: <u>037-16385</u>	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____

OPERATOR CHANGE DOCUMENTATION

- N/A 1. (Rule R615-8-10) Sundry or other legal documentation has been received from former operator (Attach to this form).
- N/A 2. (Rule R615-8-10) Sundry or other legal documentation has been received from new operator (Attach to this form).
- N/A 3. The Department of Commerce has been contacted if the new operator above is not currently operating any wells in Utah. Is company registered with the state? (yes/no) _____ If yes, show company file number: _____.
- N/A 4. (For Indian and Federal Wells ONLY) The BLM has been contacted regarding this change (attach Telephone Documentation Form to this report). Make note of BLM status in comments section of this form. Management review of **Federal and Indian** well operator changes should take place prior to completion of steps 5 through 9 below.
- Le 5. Changes have been entered in the Oil and Gas Information System (Wang/IBM) for each well listed above. (8-3-95)
- LWP 6. Cardex file has been updated for each well listed above. 8-31-95
- W 7. Well file labels have been updated for each well listed above. 9-28-95
- Le 8. Changes have been included on the monthly "Operator, Address, and Account Changes" memo for distribution to State Lands and the Tax Commission. (8-3-95)
- Le 9. A folder has been set up for the Operator Change file, and a copy of this page has been placed there for reference during routing and processing of the original documents.

ENTITY REVIEW

- Lee* 1. (Rule R615-8-7) Entity assignments have been reviewed for all wells listed above. Were entity changes made? (yes/no) ____ (If entity assignments were changed, attach copies of Form 6, Entity Action Form).
- N/A* 2. State Lands and the Tax Commission have been notified through normal procedures of entity changes.

BOND VERIFICATION (Fee wells only) ** No Fee Lease Wells at this time!*

- N/A / Lee* 1. (Rule R615-3-1) The new operator of any fee lease well listed above has furnished a proper bond.
- ___ 2. A copy of this form has been placed in the new and former operators' bond files.
- ___ 3. The former operator has requested a release of liability from their bond (yes/no) ____ . Today's date _____ 19___. If yes, division response was made by letter dated _____ 19__.

LEASE INTEREST OWNER NOTIFICATION RESPONSIBILITY

- N/A* 1. (Rule R615-2-10) The former operator/lessee of any **fee lease** well listed above has been notified by letter dated _____ 19__, of their responsibility to notify any person with an interest in such lease of the change of operator. Documentation of such notification has been requested.
DT S 8/5/95
- N/A* 2. Copies of documents have been sent to State Lands for changes involving State leases.

FILMING

- 1. All attachments to this form have been microfilmed. Date: October 6 19 95.

FILING

- ___ 1. Copies of all attachments to this form have been filed in each well file.
- ___ 2. The original of this form and the original attachments have been filed in the Operator Change file.

COMMENTS

950803 LIC F5 / Not necessary!

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.

14-20-603-246A

6. If Indian, Allottee or Tribe Name

NAVAJO TRIBAL

7. If Unit or CA, Agreement Designation
RATHERFORD UNIT

8. Well Name and No.

1-34

9. API Well No.

43-037-16385

10. Field and Pool, or exploratory Area
GREATER ANETH

11. County or Parish, State

SAN JUAN UT

SUBMIT IN TRIPLICATE

1. Type of Well

Oil Well Gas Well Other INJECTOR

2. Name of Operator Mobil Exploration & Producing U.S. Inc.
as Agent for Mobil Producing TX & NM Inc.

3. Address and Telephone No.
P.O. Box 633, Midland, TX 79702 (915) 688-2585

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
SW/SE 1132' FSL, 1980' FEL
SEC 1, T41S, R23E

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

TYPE OF SUBMISSION

- Notice of Intent
 Subsequent Report
 Final Abandonment Notice

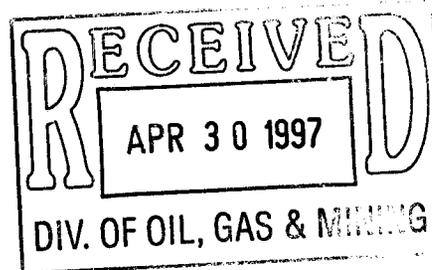
TYPE OF ACTION

- Abandonment
 Recompletion
 Plugging Back
 Casing Repair
 Altering Casing
 Other TA EXTENSION
 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.)*

MOBIL REQUEST TA EXTENSION. THIS WELL HAS BEEN EVALUATED FOR A HORIZONTAL COMPLETION



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

Signed Shirley Houshio Title ENV. & REG. TECHNICIAN Date 04-25-97

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any:

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.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

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

5. Lease Designation and Serial No.
14-20-603-246A

6. If Indian, Allottee or Tribe Name
NAVAJO TRIBAL

7. If Unit or CA, Agreement Designation
RATHERFORD UNIT

8. Well Name and No.
RATHERFORD 1-34

9. API Well No.
43-037-16385

10. Field and Pool, or exploratory Area
GREATER ANETH

11. County or Parish, State
SAN JUAN UT

SUBMIT IN TRIPPLICATE

1. Type of Well

Oil Well Gas Well Other INJECTOR

2. Name of Operator Mobil Exploration & Producing U.S. Inc.
as Agent for Mobil Producing TX & NM Inc.

3. Address and Telephone No.
P.O. Box 633, Midland, TX 79702 (915) 688-2585

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
SW/SE 1132' FSL, 1980' FEL 4147 FNL 1980 FEL
SEC 1, T41S, R23E Per Shirley Houchens chngs.
made in future.

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

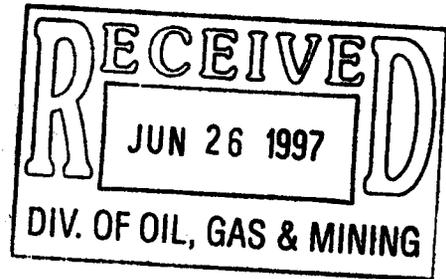
TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input checked="" type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input type="checkbox"/> Other
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> 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.)*

SEE ATTACHED

VERBAL APPROVAL REQUESTED.



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

Signed Shirley Houchens Title ENV. & REG. TECHNICIAN Date 06-23-97

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any:

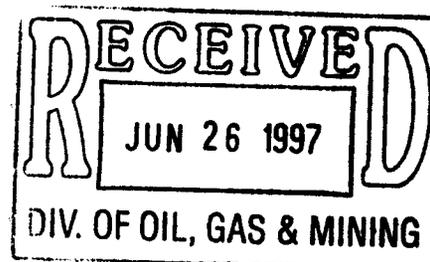
Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

RATHERFORD UNIT 1-34
TEST FOR LEAKING CIBP AND CASING
TOM COCHRANE (970) 564-5210 BEEPER (970) 382-5070

Based on our best available data, this well has a cast iron bridge plug above all the perfs, but is flowing water at surface down the flowline. The bridge plug is leaking, or the casing is leaking. Some reasonable attempt will be made to repair the casing, and the well will be put back on production. Excessive casing repair costs may lead us to rig down and re-evaluate the well.

1. RU PU. KILL WELL AS NEEDED. ND WH, NU BOP. POH W/TBG (PROBABLY 1 JT AT SURFACE).
2. GIH W/PKR, TAG CIBP @ 5400' PUH 5', TEST CIBP TO 500# FOR 15 MINS, RECORD RESULT. TEST CSG TO 500 # FOR 15 MINS, RECORD RESULTS.
- 3A. IF CASING DIDN'T LEAK AND CIBP DID, POH. DO CIBP AND RUN PRODUCTION EQPT (SN 5500', 2" PUMP, 2000' 1", 2000' 7/8", 1500' 3/4" HIGH STRENGTH RODS (RECONDITIONED IF AVAILABLE).
- 3B. IF CASING LEAKS, PUH ISOLATE LEAK, TEST 500# FOR 15 MINS.
- 4A. IF CANNOT PUMP INTO LEAK, BUT IT BLEEDS OFF, OE TBG SPOT 30-50 SX G NEAT CMT ACROSS AND ABOVE INTERVAL, RO EXCESS, SQUEEZE TO 1500# UNTIL NO MORE BLEEDOFF, LEAVE WELL SI WITH PRESSURE OVERNIGHT. DO NOT BLEED OFF PRESSURE; YOU WILL UNSQUEEZE THE WELL.
- 4A. IF CAN EIR PUMPING INTO LEAK; SET CMT RET 75' ABOVE TOP OF LEAKING INTERVAL, STING IN RET SQZ LEAK W/150 SX G NEAT TO 1500#, SD 15 MINS, PRESSURE UP TO 1500# REPEATING AS NEEDED (BUT DON'T GET TOO CLOSE TO CMT SET TIME). STING OUT OF RET, RO CMT, POH.
5. GIH W/BIT & DC'S, DO CMT, TEST TO 500# FOR 15 MINS. IF HOLDS, RUN PROD EQPT AS IN STEP 3A. OTHERWISE, REPEAT STEPS 4A OR 4B ONE TIME.
6. IF SECOND SQUEEZE FAILS, RIG DOWN AND OPERATIONS ENGINEER WILL RE-EVALUATE.

TOM COCHRANE 6/19/97



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUBMIT IN TRIPPLICATE

1. Type of Well

Oil Well Gas Well Other

2. Name of Operator **Mobil Exploration & Producing U.S. Inc.**
as Agent for Mobil Producing TX & NM Inc.

3. Address and Telephone No.
P.O. Box 633, Midland, TX 79702 915-688-2585

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
**SW/SE 1133' FSL, 1980 FEL
SEC.1, T41S, R23E**

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

5. Lease Designation and Serial No.
14-20-603-246A

6. If Indian, Allottee or Tribe Name
NAVAJO TRIBAL

7. If Unit or CA, Agreement Designation
RATHERFORD UNIT

8. Well Name and No.
RATHERFORD 1-34

9. API Well No.
43-037-16385

10. Field and Pool, or exploratory Area
GREATHER ANETH

11. County or Parish, State
SAN JUAN UT

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

TYPE OF SUBMISSION

- Notice of Intent
- Subsequent Report
- Final Abandonment Notice

TYPE OF ACTION

- Abandonment
- Recompletion
- Plugging Back
- Casing Repair
- Altering Casing
- Other _____
- Change of Plans
- New Construction
- Non-Routine Fracturing
- Water Shut-Off
- Conversion to Injection
- Dispose Water

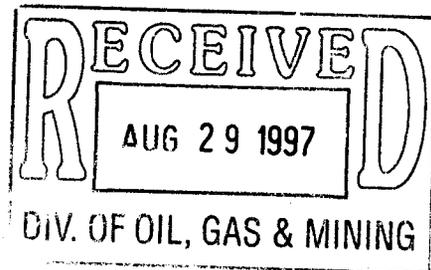
(Note: Report results of multiple completion on Well Completion or Recommendation Report and Log form.)

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.)*

BHL: LATERAL #1 - 944' SOUTH & 1166' EAST F/SURFACE SPOT (ZONE 1d).

SEE ATTACHED PROCEDURE.

78
249



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

Signed Shirley Houchins Title ENV. & REG. TECHNICIAN Date 08-26-97

(This space for Federal or State office use)

Approved by John R. Bay Title Petroleum Engineer Date 9/10/97
Conditions of approval, if any:

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.

Rutherford Unit Well #1-34 Horizontal Drilling Procedure

The objective of this procedure is to prepare this wellbore for sidetracking, sidetrack the subject well and drill one short radius horizontal lateral (1500 ft).

1. Prepare location and dig working pit.
2. MIRU WSU, reverse unit, and H₂S equipment. Bullhead kill weight fluid down tubing.
3. ND wellhead and NU BOP's. Pressure test BOP's.
4. Continue to POH with tubing and ESP.
5. TIH with full gauge bit and casing scraper to PBTD or gage ring. TOH with bit and scraper.
6. Ensure well will circulate, and set CIBP above perfs. Pressure test casing to 1000 psi.
7. RDMO WSU.
8. MIRU 24 hr WSU.
9. PU tubing, drill collars, and drill pipe in derrick and run in hole. Then POH and stand back.
10. Run packer on wireline and set using GR/CCL log to correlate with. RD wireline.
11. PU drillpipe with UBHO sub in string with bottom trip whipstock.
12. Run gyro and obtain orientation whipstock face, set at bearing of interest.
13. POH w/ gyro. Shear pilot mill bolt and start milling window.
14. POH and PU window mill and watermelon mill to finish window and drill 2 ft of formation.
15. POH w/ mills and RBIH w/ new mills to clean up window.
16. PU drill pipe and directional motors to drill curve. Use the gyro to drill until the inclination dictates that the gyro must be pulled.
17. Finish drilling the curve using the MWD.
18. POH once curve is finished and PU lateral motor to drill the lateral using MWD.
19. Once lateral TD is reached, POH w/ directional equipment.
20. PU RTBP and set preparing for completion. RDMO.

WELL HISTORY

Ratherford Unit # 1-34
 Greater Aneth Field
 San Juan County, Utah
 1133' FSL 1980' FEL (SWSE)
 SEC 1, T41S, R23E
 API 43-037-16385
 Prism 0042920
 KB 4624' GL 4611'

- 01-24-61 Spud, ran 13-3/8" surf csg set @ 100', 8-5/8" H-40 28# inter csg set @ 1463', 5-1/2" K-55 15.5# prod csg set @ 5471'. Perfs D.C. & Ismay - 5418'-56', OPEN HOLE 5471-5604'. TD 5584', PBDT 5584'.
- 08-06-63 Convert to WIW. Sqzd Ismay perfs 5418-5456', drilled cmt to TD 5584' & drld new hole to 5604'. Ran 2-1/2" tbg w/ Marlex liner & Tension Pkr, set @ 5392'. HU to inj.
- 08-25-65 Acidize w/ 1000 gal 15% acid. Max press 2500#, min 1700#, SI 1200#, 10 min - on vac.
- 2-26-78 CO TO 5596'. BEGAN ROTATION ON METAL. SET BAKER LOKSET PKR AT 5389'. RWTI.
- 04-27-78 Acidize w/ 1200 gal acid. Avg rate - 2.25 bpm @ 2600#. Final rate - 5 bpm @ 2000#.
- 1-7-87 Convert f/ injector to producer. CO open hole to 5596', PB open hole f/ 5596' to 5544'. Sqzd Ismay perfs, DO to PBDT 5544'. Acidize Zone I w/ 5000 gal 28% acid. Acid broke into Zone II, Ismay perfs broke dn, re-sqzd Ismay perfs Zone I & II w/ 200 sx cmt. DO to 5544', perf OH w/ 4 spf 5536-42', 5518-28', 5498-5508', 5491-96', 5472-80'. Acidize Zone I OH w/ 5000 gal 28% acid. Run prod equip. NOTE: INJECTOR WAS SHUT IN PRIOR TO THIS WORK BUT NO INFO ON DATE WHEN SHUT IN.
- 08-06-87 Acidize 6 BBL 28% HCL W/ CORR INHIBITOR. PUMP SCALE INHIBITOR.
- 02-04-88 Well SI. LD prod string due to 0 BO & large vol of wtr.
- 05-13-92 Reactivate producer. CO to 5546'. SET CICR AT 5462' - LEAKED. DO CICR & PUSH TO BOTTOM. SET PKR AT 5098'. Pmpd 150 sx Cl G cmt. DO to 5461' & circ clean. Perf'd f/ 5421-31', 5446-52' w/ 2 spf. Set pkr @ 5290', acidized w/ 445 gal 28% HCL, followed by 2500 gal 20 % HCL w/ 50 BS. Avg 2300# @ 3 BPM. ISIP 500#, 5 MIN 0#. SWAB. TIH w/ prod string, TAC @ 5330', SN @ 5455'. RWTP.
- 06-29-92 Well Profile: TD 5604', PBDT 5462', 2-7/8" J-55 tbg set @ 5459', TAC @ 5329'.

No other work to date.

GOK 2-17-94

Reviewed by LA Tucker

3-7-95 SET CIBP AT 5400'. TA WELL. (LA Tucker 2-16-96)

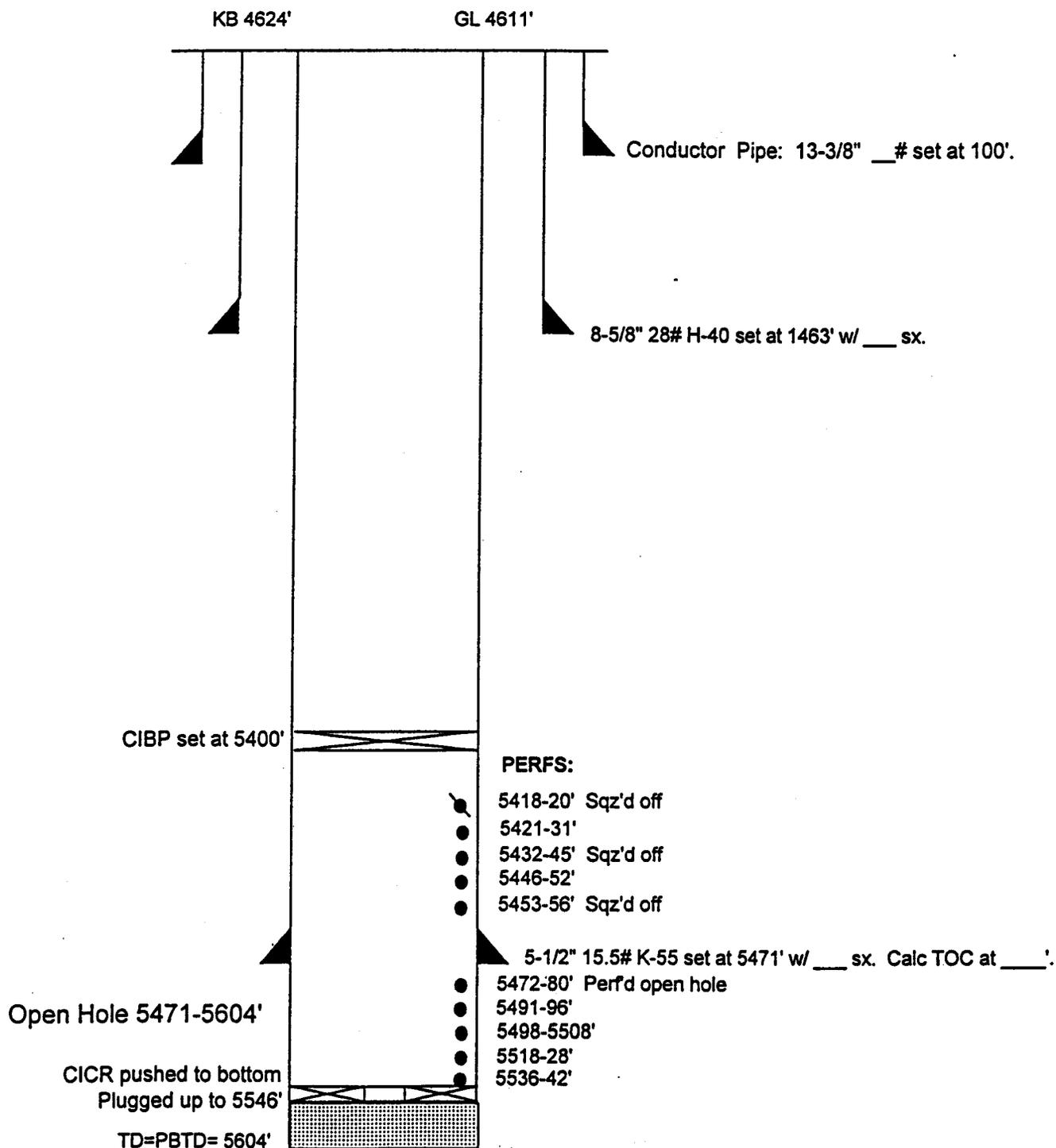
7/97

RT Prod

RATHERFORD UNIT # 01-34
GREATER ANETH FIELD
1133' FSL & 1980' FEL
SEC 1-T41S-R23E
SAN JUAN COUNTY, UTAH
API 43-037-16385
PRISM 0042920

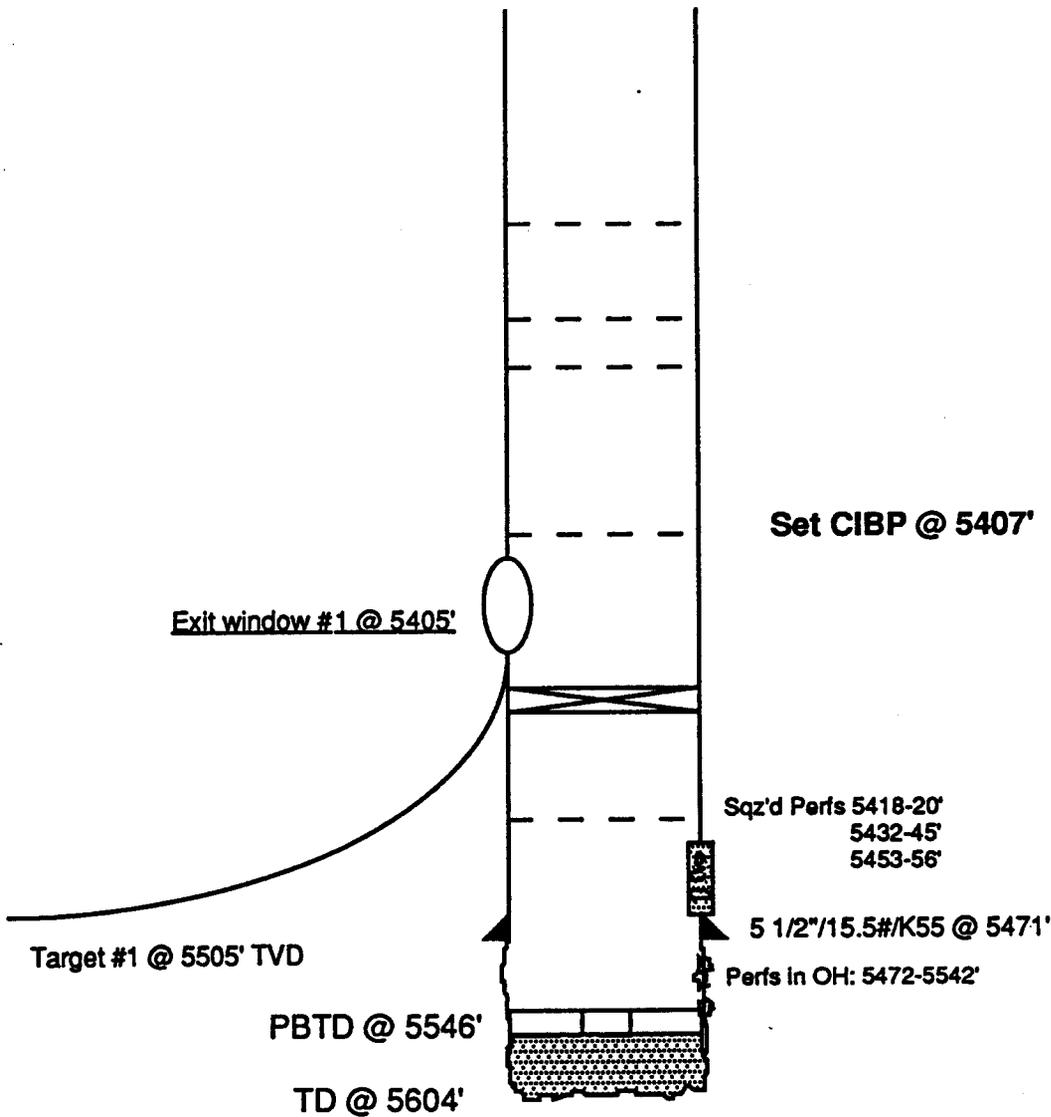
PRODUCER

Capacities:	bb/ft	gal/ft	cuf/ft
2-7/8" 6.5#	.00579	.2431	.0325
5-1/2" 14#	.0244	1.0249	.1370
5-1/2" 15.5#	.0238	.9997	.1336
2-7/8x5.5 14#	.0164	.6877	.0919
2-7/8x5.5 15.5#	.0158	.6625	.0886



Whipstock plan for Ratherford #1-34

Estimated casing collars@
 5319',
 5357',
 5395',
 5433',



<u>Window</u>	<u>Btm-Top of window</u>	<u>Extension length</u>	<u>Curve radius</u>	<u>Bearing</u>	<u>Horiz Displ</u>
1	5405-5399'	-	100	129	1500

*The double spline is 2.77 ft long and the bottom of the whipstock, latch, and debris sub and shear sub are 11.68 ft long. These lengths must be added to the extension lengths to determine the entire whipstock assembly length.

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 08/29/97

API NO. ASSIGNED: 43-037-16385

WELL NAME: RATHERFORD 1-34 MULTI-LEG
 OPERATOR: MOBIL EXPL & PROD (N7370)

PROPOSED LOCATION:
 SWSE 01 - T41S - R23E
 SURFACE: 1133-FSL-1980-FEL
 BOTTOM: 0189-FSL-0814-FEL
 SAN JUAN COUNTY
 GREATER ANETH FIELD (365)

INSPECT LOCATION BY: / /		
TECH REVIEW	Initials	Date
Engineering		
Geology		
Surface		

LEASE TYPE: IND
 LEASE NUMBER: 14-20-603-246A

PROPOSED PRODUCING FORMATION: DSCR

RECEIVED AND/OR REVIEWED:

Plat

Bond: Federal State Fee
 (Number UNKNOWN)

Potash (Y/N)

Oil shale (Y/N)

Water permit
 (Number NAVAJO ALLOTMENT)

RDCC Review (Y/N)
 (Date: _____)

LOCATION AND SITING:

R649-2-3. Unit: RATHERFORD

R649-3-2. General.

R649-3-3. Exception.

Drilling Unit.
 Board Cause no: _____
 Date: _____

COMMENTS: _____

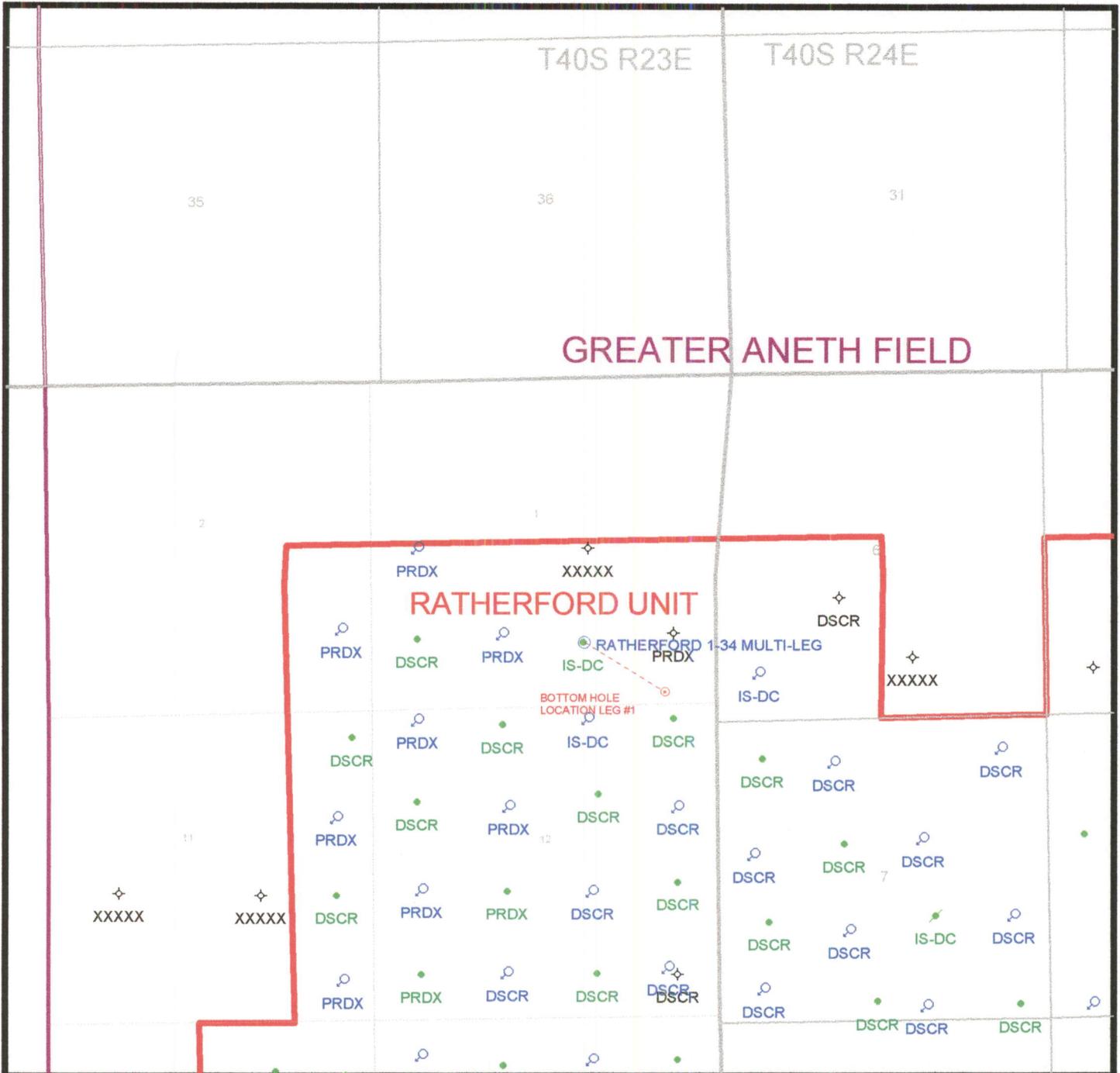
STIPULATIONS: 1- Direction of Drilling

OPERATOR: MOBIL EXPL & PROD (N7370)

FIELD: GREATER ANETH (365)

SEC, TWP, RNG: SEC.1, T41S, R23E

COUNTY: SAN JUAN UAC: R649-2-3 RATHERFORD UNIT



PREPARED:
DATE: 2-SEP-97



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

Michael O. Leavitt
Governor
Ted Stewart
Executive Director
James W. Carter
Division Director

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

September 10, 1997

Mobil Exploration & Producing U.S., Inc.
P.O. Box 633
Midland, Texas 79702

Re: Ratherford 1-34 (Re-entry) Well, 1133' FSL, 1980' FEL,
SW SE, Sec. 1, T. 41 S., R. 23 E., San Juan County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to re-enter and drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-037-16385.

Sincerely,

A handwritten signature in cursive script that reads "John R. Baza".

John R. Baza
Associate Director

lwp

Enclosures

cc: San Juan County Assessor
Bureau of Land Management, Moab District Office

Operator: Mobil Exploration & Producing U.S., Inc.
Well Name & Number: Ratherford 1-34 (Re-entry)
API Number: 43-037-16385
Lease: 14-20-603-246A
Location: SW SE Sec. 1 T. 41 S. R. 23 E.

Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to Drill.

2. Notification Requirements

Notify the Division within 24 hours following spudding the well or commencing drilling operations. Contact Jim Thompson at (801)538-5336.

Notify the Division prior to commencing operations to plug and abandon the well. Contact John R. Baza (801)538-5334.

3. Reporting Requirements

All required reports, forms and submittals shall be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. In accordance with Utah Admin. R. 649-3-11, Directional Drilling, submittal of a complete angular deviation and directional survey report is required.

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

Name of Company: MOBIL E & P

Well Name: RATHERFORD UNIT 1-34 (RE-ENTRY)

Api No. 43-037-16385

Section: 1 Township: 41S Range: 23E County: SAN JUAN

Drilling Contractor: BIG "A"

Rig # 36

SPUDDED:

Date: 9/10/97

Time: _____

How: ROTARY

Drilling will commence: _____

Reported by: NANCY

Telephone NO.: _____

Date: 9/10/97 Signed: JLT

✓

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.
14-20-603-246A

6. If Indian, Allottee or Tribe Name
NAVAJO TRIBAL

7. If Unit or CA, Agreement Designation
RATHERFORD UNIT

8. Well Name and No.
RATHERFORD 1-34

9. API Well No.
43-037-16385

10. Field and Pool, or exploratory Area
GREATER ANETH

11. County or Parish, State
SAN JUAN UT

SUBMIT IN TRIPLICATE

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator **Mobil Exploration & Producing U.S. Inc.
as Agent for Mobil Producing TX & NM Inc.**

3. Address and Telephone No.
P.O. Box 633, Midland, TX 79702 915-688-2585

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
**SW/SE 1133' FSL, 1980 FEL
SEC.1, T41S, R23E**

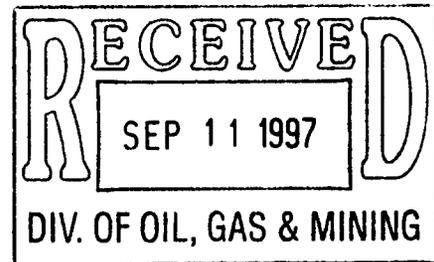
12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> 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.)*

ATTACHMENT



14. I hereby certify that the foregoing is true and correct
Signed Shirley Houchens Title ENV. & REG. TECHNICIAN Date 09-08-97

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any: _____

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.

* See Instruction on Reverse Side

WD tax credit 12/97

**ATTACHMENT - FORM 3160-5
RATHERFORD UNIT #1- 34
14-20-603-246A
NAVAJO TRIBAL
SAN JUAN, UTAH**

- 07-11-97 NOTIFY NAVAJO EPA @ 8:30 AM, NOTIFY WAYNE TOWNSEND, BLM @ 8:32 AM 7-10-97. MOVE IN RIG UP NAVAJO WEST RIG #36, MIRU PUMP & PIT. SICP @ 0. NIPPLE DOWN WELL HEAD. NIPPLE UP BOPE. RIG UP TO CSG & TEST CSG TO 500 PSI. HELD. SIFN.
- 07-12-97 SICP @ 7:30 WAS 350 PS I. PICK-UP & RIH W/4.75" BIT, 6- 3 1/2" DRILL COLLARS, AND 2 7/8" TBG TO 5400' . TAG UP ON CIBP, DRLG OUT CIBP. RIH TO 5469' TAG UP ON PBTD, CIRC HOLE CLEAN. POH F/5469 TO 4844'. LAY DOWN WORKSTRING. SIFN.
- 07-13-97 SIP @ 0 PSI. POOH & LD 2 7/8" WS. PU & RIH W/TAG ASSM. AS FOLLOWS: 2 7/8" BP, 1 JT 2 7/8" TBG, 4" PERF SUB, 2 7/8" SN, 3 JTS IPC TBG, 3 JTS 2 7/8" J55 8RD TBG, TAC, 175 JTS 2 7/8" TO SURFACE. TAC TO BE SET @ 5235', EOT @ 5460" SDFN
- 07-14-97 ND BOP, NU WELLHEAD, SET TAC W/18K TENSION. PU & RIH W/PUMP & RODS. SPACE RODS OUT, HANG WELL ON, LOAD TBG, & TEST TO 500 PSI, RIG DOWN PUMP & LINES. TURN WELL DOWN FLOWLINE. RDMO PU.



ROCKY MOUNTAIN GEO-ENGINEERING

Well Logging • Consulting Geology • Coal Bed Methane Services • Computerized Logging Equipment & Software

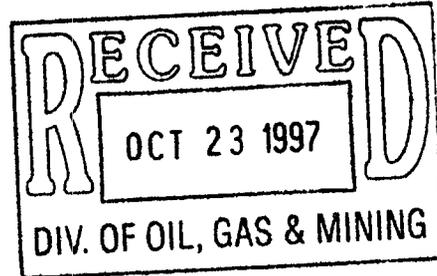
ROCKY MOUNTAIN GEO-ENGINEERING CORP.

2450 INDUSTRIAL BLVD. • GRAND JUNCTION, CO 81505

(970) 243-3044 • (FAX) 241-1085

Tuesday, October 21, 1997

Division of Oil & Gas Mining
State of Utah
1636 W. North Temple
Salt Lake City, UT 84116



Re: Ratherford Unit #1-34
Sec. 1, T41S, ~~R24E~~ **R23E**
San Juan County, Utah

Dear Sirs:

43 037 16385 DRL

Enclosed are the final computer colored logs and geology reports for the above referenced well.

IN LOG FILE

We appreciate the opportunity to be of service to you and look forward to working with you again in the near future.

If you have any questions regarding the enclosed data, please contact us.

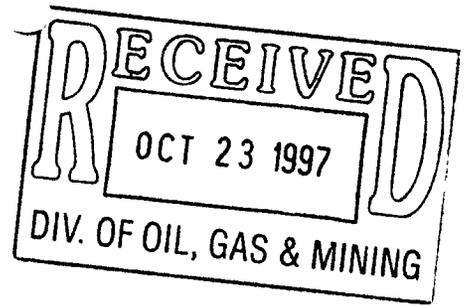
Sincerely,

Bill Nagel
Senior Geologist

BN/dn

Enc. 1 Final Computer Colored Log & 1 Geology Report

cc Letter Only; Dana Larson; Mobil E & P U.S., Inc.; Midland, TX



MOBIL

**RATHERFORD UNIT #1-34
SE HORIZONTAL LATERAL LEG #1
1-D POROSITY BENCH
DESERT CREEK MEMBER
PARADOX FORMATION
SECTION 1, T41S, R23E
SAN JUAN, UTAH**

**GEOLOGY REPORT
by
DAVE MEADE
ROCKY MOUNTAIN GEO-ENGINEERING CORP.
GRAND JUNCTION, COLORADO
(970) 243-3044**

MICROFICHE

TABLE OF CONTENTS

WELL SUMMARY.....	3
DAILY WELL CHRONOLOGY.....	4
DAILY ACTIVITY.....	5
BIT RECORD.....	6
SURVEY RECORD.....	7
MUD RECORD.....	10
SAMPLE DESCRIPTIONS.....	11
FORMATION TOPS.....	19
GEOLOGIC SUMMARY AND ZONES OF INTEREST.....	20
WELL PLOTS.....	24

WELL SUMMARY

OPERATOR: MOBIL EXPLORATION & PRODUCTION U.S. INC.

NAME: RATHERFORD UNIT #1-34 SE HORIZONTAL LATERAL
LEG #1 IN 1-D POROSITY BENCH, DESERT CREEK

LOCATION: SECTION 1, T41S, R23E

COUNTY/STATE: SAN JUAN, UTAH

ELEVATION: KB: 4624' GL: 4611'

SPUD DATE: 10/05/97

COMPLETION DATE: 10/12/97

DRILLING ENGINEER: SIMMON BERRARA

WELLSITE GEOLOGY: DAVE MEADE

**MUDLOGGING
ENGINEERS:** DAVE MEADE / MARK KOURY

CONTRACTOR: BIG "A" RIG 25
TOOLPUSHER: J. DEES

HOLE SIZE: 4 3/4"

CASING RECORD: KICK OFF POINT IN WINDOW AT 5315' MEASURED DEPTH

DRILLING MUD: M-I
ENGINEER: RON WESTENBERG
MUD TYPE: FRESH WATER & BRINE WATER W/ POLYMER SWEEPS

**DIRECTIONAL
DRILLING CO:** SPERRY-SUN

ELECTICAL LOGGING: NA

TOTAL DEPTH: 6936' MEASURED DEPTH; 5477' TRUE VERTICAL DEPTH

STATUS: TOH & LAY DOWN TOOLS - PREPARE FOR RIG MOVE

DRILLING CHRONOLOGY
RATHERFORD UNIT #1-34
1-D SE HORIZONTAL LATERAL LEG #1

DATE	DEPTH	DAILY	ACTIVITY
10/05/97	0'	0'	MOVE RIG & RIG UP
10/06/97	5307'	4'	P.U. DRL COLLARS & DRL PIPE-TIH W/WHIPSTOCK-RIG UP- WIRE LINE & RUN GYRO-ORIENT WHIPSTOCK & SHEAR OFF-CIR-MILL W/STARTER MILL 5307'-5309'-TOH-L.D. STARTER MILL-P.U. WINDOW MILL & WATER MELLON-TIH-CHANGE OU RUBBER IN FLOW LINE-MILL FROM 5307'-5311'
10/07/97	5311'	40'	MILL 5311'-5315'-PUMP 10 BBL SWEEP-CIR-L.D. 18 JTS PIPE-TOH-L.D MILLS-P.U. BIT & CURVE ASSEMBLY-TIH-RIG & RUN GYRO DATA & GET GYRO TOOL FACE-TIME DRLG @ 2 MIN/INCH FROM 5315' TO 5317'-DRLG & WIRE LINE SURVEYS-TO 5340'-PULL GYRO & RIG DOWN GYRO DATA-DIR DRLG & SURVEYS TO 5351'-MWD FAILED-PUMP BRINE-TOH-REPLACE HYDRAULIC LINE ON TONGS
10/08/97	5351'	212'	TOH-CHANGE MWD & TEST-TIH-CIR-DIR DRLG & SURVEYS
10/09/97	5563'	151'	DIR DRLG & SURVEYS TO 5620'-PUMP 10 BBL SWEEP & CIR OUT SMPLS-PUMP 10 BBL BRINE-L.D. 41 JTS D.P. & TOH-L.D. CURVE BHA-P.U. LATERAL BHA & BIT-ORIENT & TEST MWD & MOTOR-P.U. 42 JTS DP & 4 1/4" DRL COLLARS-TIH-CIR-DIR DRLG & SURVEYS
10/10/97	5714'	405'	DIR DRLG & SURVEYS TO 6118'-CIR. OUT SPLS & SWEEP-SPOT 10# BRINE-TOH-CHANGE OUT-MWD-TIH
10/11/97	6119'	398'	TEST MWD-TIH-CIR-DIR DRLG & SURVEYS
10/12/97	6517'	419'	DIR DRLG & SURVEYS-CIR SPLS & SWEEP @ TD OF 6936'-TOH-L.D. DRL PIPE-L.D. LATERAL ASSEMBLY-TIH-RETRIEVE WHIPSTOCK-PREPARE TO MOVE RIG

DAILY ACTIVITY

Operator: MOBIL
Well Name: RATHERFORD UNIT #1-34 SE 1-A HORIZONTAL LATERAL LEG #1

DATE	DEPTH	DAILY	DATE	DEPTH	DAILY
10/05/97	0'	0'			
10/06/97	5307'	4'			
10/07/97	5311'	40'			
10/08/97	5351'	212'			
10/09/97	5563'	151'			
10/10/97	5714'	405'			
10/11/97	6119'	398'			
10/12/97	6517'	419'			
10/13/97	6936'	TD			

BIT RECORD

OPERATOR: MOBIL

WELL NAME: RATHERFORD UNIT #1-34 SE 1-A HORIZONTAL LATERAL LEG #1

RUN	SIZE	MAKE	TYPE	IN/OUT	FTG	HRS	FT/HR
#1	4 3/4"	STC	MF-3PG	5315'/ 5620'	305'	28.0	10.9
#2	4 3/4"	HTC	STR-20	5620'/ 6936'	1316'	56.5	23.3

SPERRY-SUN DRILLING SERVICES
SURVEY DATA

Customer ... : Mobil (Utah)
Platform ... : RATHERFORD UNIT
Slot/Well .. : BA25/1-34, 1A1

MEASURED DEPTH	ANGLE DEG	DIRECTION DEG	TVD	NORTHINGS FEET	EASTINGS FEET	VERTICAL SECTION	DOG LEG
5200.00	1.06	182.56	5199.66	9.28 N	19.40 W	-20.92	0.00
5308.00	1.06	182.56	5307.64	7.29 N	19.49 W	-19.73	0.00
5315.00	4.80	147.60	5314.63	6.97 N	19.34 W	-19.42	56.83
5325.00	8.80	139.86	5324.56	6.04 N	18.62 W	-18.27	40.95
5335.00	12.50	137.37	5334.39	4.65 N	17.39 W	-16.45	37.28
5345.00	16.20	136.15	5344.07	2.85 N	15.69 W	-13.99	37.12
5355.00	19.50	135.41	5353.59	0.66 N	13.55 W	-10.95	33.08
5365.00	22.20	134.92	5362.93	1.87 S	11.04 W	-7.41	27.06
5375.00	24.20	134.56	5372.12	4.64 S	8.25 W	-3.49	20.05
5385.00	26.60	134.30	5381.16	7.64 S	5.18 W	0.78	24.03
5395.00	29.60	130.80	5389.98	10.82 S	1.71 W	5.48	34.22
5405.00	32.70	132.10	5398.54	14.25 S	2.16 E	10.65	31.72
5415.00	34.60	137.50	5406.86	18.15 S	6.09 E	16.15	35.43
5425.00	36.20	142.50	5415.01	22.59 S	9.81 E	21.84	33.08
5435.00	39.10	139.80	5422.93	27.34 S	13.64 E	27.81	33.36
5445.00	42.70	136.20	5430.49	32.20 S	18.02 E	34.27	43.02
5455.00	46.70	135.30	5437.60	37.24 S	22.93 E	41.25	40.50
5465.00	49.80	138.30	5444.25	42.68 S	28.03 E	48.64	38.23
5475.00	52.00	141.60	5450.56	48.62 S	33.02 E	56.26	33.76
5485.00	53.10	142.80	5456.64	54.89 S	37.89 E	63.99	14.55
5495.00	53.50	139.80	5462.62	61.14 S	42.90 E	71.82	24.38
5505.00	55.40	139.00	5468.43	67.32 S	48.20 E	79.82	20.08
5515.00	58.40	136.80	5473.90	73.53 S	53.81 E	88.10	35.21
5525.00	63.10	134.90	5478.78	79.79 S	59.89 E	96.76	49.83
5535.00	67.40	134.20	5482.97	86.16 S	66.36 E	105.79	43.47
5545.00	71.40	133.50	5486.48	92.64 S	73.11 E	115.12	40.53
5555.00	72.80	135.70	5489.56	99.32 S	79.89 E	124.59	25.18
5565.00	72.70	133.60	5492.52	106.03 S	86.68 E	134.09	20.08
5575.00	73.90	134.30	5495.40	112.68 S	93.57 E	143.63	13.75
5585.00	77.00	135.40	5497.91	119.51 S	100.44 E	153.26	32.78
5595.00	81.20	135.70	5499.80	126.52 S	107.31 E	163.01	42.10
5620.00	90.50	132.60	5501.61	143.86 S	125.18 E	187.82	39.20
5660.98	90.30	131.40	5501.32	171.28 S	155.63 E	228.74	2.97
5692.73	89.80	129.40	5501.29	191.86 S	179.81 E	260.48	6.49
5724.52	92.40	128.20	5500.68	211.77 S	204.58 E	292.26	9.01
5756.22	94.00	129.50	5498.91	231.62 S	229.23 E	323.91	6.50
5787.89	93.40	129.10	5496.87	251.64 S	253.68 E	355.51	2.28
5818.99	91.80	130.20	5495.46	271.46 S	277.60 E	386.58	6.24

SPERRY-SUN DRILLING SERVICES
SURVEY DATA

Customer ... : Mobil (Utah)
Platform ... : RATHERFORD UNIT
Slot/Well .. : BA25/1-34, 1A1

MEASURED DEPTH	ANGLE DEG	DIRECTION DEG	TVD	NORTHINGS FEET	EASTINGS FEET	VERTICAL SECTION	DOG LEG
5849.97	92.60	129.60	5494.27	291.32 S	301.35 E	417.53	3.23
5881.88	93.10	130.20	5492.68	311.76 S	325.80 E	449.40	2.45
5913.65	92.10	130.20	5491.24	332.25 S	350.04 E	481.13	3.15
5945.40	91.00	129.80	5490.38	352.65 S	374.36 E	512.86	3.69
5977.16	92.10	129.10	5489.52	372.82 S	398.87 E	544.61	4.10
6008.97	91.80	128.60	5488.44	392.76 S	423.63 E	576.40	1.83
6040.65	91.20	127.70	5487.61	412.33 S	448.53 E	608.06	3.41
6072.45	91.70	127.20	5486.81	431.66 S	473.77 E	639.84	2.22
6104.26	91.80	126.10	5485.84	450.64 S	499.28 E	671.61	3.47
6136.07	91.90	126.80	5484.81	469.52 S	524.85 E	703.37	2.22
6167.70	92.00	127.40	5483.73	488.59 S	550.07 E	734.96	1.92
6199.44	89.90	127.40	5483.21	507.87 S	575.28 E	766.69	6.62
6231.23	86.70	126.50	5484.15	526.97 S	600.67 E	798.44	10.46
6262.94	87.30	125.80	5485.81	545.65 S	626.24 E	830.06	2.91
6294.75	88.40	124.90	5487.00	564.04 S	652.16 E	861.79	4.47
6326.59	88.90	124.00	5487.75	582.04 S	678.41 E	893.52	3.23
6358.41	89.40	123.10	5488.22	599.63 S	704.93 E	925.19	3.24
6390.27	88.90	122.80	5488.70	616.95 S	731.66 E	956.87	1.83
6422.06	90.40	123.30	5488.89	634.29 S	758.30 E	988.48	4.97
6453.89	91.10	124.50	5488.47	652.04 S	784.72 E	1020.19	4.36
6485.63	91.50	125.40	5487.75	670.22 S	810.73 E	1051.84	3.10
6516.69	91.20	126.50	5487.02	688.45 S	835.87 E	1082.84	3.67
6548.45	91.20	127.20	5486.36	707.49 S	861.27 E	1114.57	2.20
6580.32	91.80	129.50	5485.52	727.26 S	886.26 E	1146.43	7.46
6611.32	92.10	131.00	5484.47	747.27 S	909.90 E	1177.40	4.93
6642.24	91.50	132.50	5483.50	767.85 S	932.96 E	1208.27	5.22
6673.25	90.80	133.00	5482.87	788.90 S	955.73 E	1239.21	2.77
6705.05	90.20	133.70	5482.60	810.73 S	978.85 E	1270.92	2.90
6736.79	89.80	133.90	5482.60	832.69 S	1001.76 E	1302.54	1.41
6768.54	92.30	134.40	5482.02	854.80 S	1024.53 E	1334.16	8.03
6800.28	91.50	134.40	5480.96	877.00 S	1047.20 E	1365.74	2.52
6832.03	91.40	133.90	5480.16	899.11 S	1069.97 E	1397.35	1.61
6863.92	92.30	134.60	5479.13	921.35 S	1092.80 E	1429.09	3.57
6902.00	91.20	133.90	5477.97	947.91 S	1120.07 E	1466.99	3.42
6936.00	91.20	133.90	5477.26	971.48 S	1144.56 E	1500.86	0.00

SPERRY-SUN DRILLING SERVICES
SURVEY DATA

THE DOGLEG SEVERITY IS IN DEGREES PER 100.00 FEET.
N/E COORDINATE VALUES GIVEN RELATIVE TO WELL SYSTEM REFERENCE POINT.
TVD COORDINATE VALUES GIVEN RELATIVE TO WELL HEAD.
THE VERTICAL SECTION ORIGIN IS WELL HEAD.
THE VERTICAL SECTION WAS COMPUTED ALONG 129.00 (TRUE).
CALCULATION METHOD: MINIMUM CURVATURE.

6936 PROJECTED AT THE BIT

MUD REPORT

OPERATOR: MOBIL

WELL NAME: RATHERFORD UNIT #1-34 SE 1-A HORIZONTAL LATERAL LEG #1

DATE	DEPT H	WT	VIS	FLS	YLD	GEL	pH	WL	CK	CHL	CA	SD	OH	WTR
10/05/97	0'	NO CHECK	-	-	-	-	-	-	-	-	-	-	-	-
10/06/97	0'	NO CHECK	-	-	-	-	-	-	-	-	-	-	-	-
10/07/97	5315'	8.4	26	1	-	0/0	10.0	NC	NC	13000	1200	-	0%	100%
10/08/97	5376'	8.4	27	1	1	0/0	11.4	NC	NC	14000	1200	-	6%	94%
10/09/97	5620'	8.4	27	1	1	0/0	11.6	NC	NC	19000	1600	-	5%	95%
10/10/97	5839'	8.5	27	2	1	0/0	11.4	NC	NC	23000	1600	-	4%	96%
10/11/97	6161'	8.5	27	2	1	0/0	11.6	NC	NC	23000	1600	-	8%	92%
10/12/97	6744'	8.5	27	2	1	0/0	11.6	NC	NC	30000	1600	-	8%	92%

SAMPLE DESCRIPTIONS

OPERATOR: MOBIL

WELL NAME: RATHERFORD UNIT #1-34 SE 1-A HORIZONTAL LATERAL LEG #1

DEPTH	LITHOLOGY
5315.00 5320.00	"LS crm-wh,crpxl-micxl,rthy-chk,occ sl slty,arg,dns,tt,NFSOC,occ grdg to ltgy v lmy sl sdy SLTST,w/v thn scat ltbrn crpxl DOL tt NFSOC,v rr trnsi-bf CHT frag"
5320.00 5330.00	"LS occ bf,AA,v sl anhy,sl dol-DOL AA,w/v thn dkgybrn-dkgy,sl carb,calc-dol,mica SH lams"
5330.00 5340.00	"LS crm-wh,occ bf,crpxl-micxl,rthy-chk,occ sl slty,arg,dns,sl anhy-v rr ANHY xl,tt-v rr intxl POR,v p dull yel FLOR,NSOC,v rr thn,scat ltbrn crpxl DOL,tt NFSOC & SH AA"
5340.00 5350.00	"LS crm-tan-ltgy,wh ip,crpxl-micxl,rthy-chk,occ dns,sl chty-rr trnsi CHT frag,v sl dol,n-v rr intxl POR,v rr spty dull yel FLOR,NSOC,tr gybrn micxl lmy arg DOL incl,v rr intxl POR,NFSOC,v rr trnsi CHT frag"
5350.00 5360.00	"LS bf-tan-crm-wh,crpxl-micxl,rthy-chk, chty-tr trnsi-bf-gy CHT frag,tt,NFSOC,rr DOL AA,NFSOC,scat dkgy-blk calc-sl dol occ carb sl slty SH frag"
5360.00 5370.00	"LS AA,bcmg v mot,scat ANHY xl-incl,sl fos,tr dkbrn-blk CHT frag,rr intxl-frac POR,tr dull yel FLOR,spty dkbrn STN,p slow dif CUT,v rr mbrn micxl dns DOL lams"
5370.00 5380.00	"LS AA,v rr POR-FLOR-STN-CUT AA,sl incr SH,v rr lmy DOL AA,scat CHT AA"
5380.00 5400.00	"LS brn-gybrn,crm-wh,mot gybrn-wh,crpxl-micxl,rthy-chk,v sl slty,arg,dol,anhy,scat tan-smky gybrn CHT frag,fos,tt-v rr intxl POR,n-v rr spty dull yel FLOR,n vis STN,n-v p slow CUT,v rr dkgybrn,micxl,lmy,tt DOL incl,NFSOC"
5400.00 5410.00	"LS AA,ltgybrn,incr micxl,v rr POR,NFSOC,w/v rr SH AA,tr CHT AA,tr brn-gybrn,micxl,arg,v lmy,shly,tt DOL,NFSOC"
5410.00 5420.00	"LS tan-brn-gybrn,AA,sl slty,tt,NFSOC,scat CHT AA,rr lmy gybrn-brn DOL incl AA,NFOSC,w/scat thn ltgy-gy,sl sdy,v lmy,mica SLTST"
5420.00 5440.00	"LS tan-ltbrn-brn,crm-wh,crpxl-vfxl,arg-chk ip,occ sl alg,slty ip,v sl dol, chty-scat brn-dkgybrn CHT frag,tr thn dkgy-blk dol-calc v sl carb mica sl slty SH lams,tt-tr intxl-sl alg POR,tr-fr dull-bri yel FLOR,rr-tr spty ltbrn STN,tr-fr slow-mod fast stmg CUT,rr thn lmy gybrn-brn micxl DOL incl,n vis POR,NFSOC"
5442.00 5456.00	"LS crm-wh,crpxl-micxl,arg-chk ip,occ sl alg,slty ip,v sl dol, chty-scat clr CHT frag,tr thn dkgy-blk dol-calc v sl carb mica sl slty SH lams,tt-tr intxl-sl alg POR,tr-fr dull-bri yel FLOR,rr-tr spty ltbrn STN,tr-fr slow-mod fast stmg CUT,rr thn lmy gybrn micxl DOL incl,tr vis POR,NFSOC"
5461.00 5466.00	"LS AA / incrs gran,sl incrs arg"
5469.00 5477.00	"DOL lt-mgy,gybrn,ltbrn,frm,micxl-crpxl,arg ip,slty,grdg to dol SLTST,lmy,occ chky,tt,alg,tr cht,mod yel flor,ltbrn stn,/mlky yel cut"

DEPTH	LITHOLOGY
5480.00	5490.00 "SH dkgy-blk,sbblky-sbplty,calc-sl dol,carb-sooty,v sl mica-sl slty,w/v thn tan-crm crpxl-micxl,dol LS frag & scat ltbrn-brn crpxl-micxl sl lmy anhy DOL tt-v rr intxl POR,v rr dull yel FLOR,n vis STN,v p slow CUT"
5490.00	5500.00 "SH AA,incr tan,crpxl-micxl sl slty dol anhy LS,scat lt-mbrn micxl lmy arg DOL,tt,NFSOC"
5500.00	5510.00 "LS crm-wh,crpxl-micxl,arg-chk ip,occ sl alg,slty ip,v sl dol,chtly-scat clr CHT frag,tr thn dkgy-blk dol-calc mica sl slty tt-tr intxl-sl alg POR,tr-fr dull-bri yel FLOR,rr-tr spty ltbrn STN,tr-fr slow-mod fast strmg cut"
5510.00	5530.00 "LS crm-wh,crpxl-micxl,arg-chk ip,slty ip,v sl dol,chtly-scat clr CHT frag,tr thn dkgy-blk dol-calc mica sl slty tt-tr intxl-sl alg POR,tr-fr dull-bri yel FLOR,rr-tr spty ltbrn STN,tr-fr slow-mod fast strmg cut"
5514.00	5516.00 "LS AA"
5530.00	5550.00 "LS crm-wh,tan,crpxl-micxl,arg-chk ip, slty ip,dol,chtly-scat clr CHT frag,tr thn dkgy-blk dol-calc mica sl slty tt-tr intxl-sl alg POR,tr-fr dull-bri yel FLOR,rr-tr spty ltbrn STN,tr-fr slow-mod fast strmg cut"
5551.00	5564.00 "LS crm-wh,tan,crpxl-micxl,arg-chk ip,occ sl alg,slty ip,dol,chtly-scat clr CHT frag,tr thn dkgy-blk dol-calc mica sl slty tt-tr intxl- alg POR,tr-fr dull-bri yel FLOR,rr-tr spty ltbrn STN,tr-fr slow-mod fast strmg cut, anhy fl,occ clr xl anhy"
5562.00	5566.00 "LS AA"
5563.00	5572.00 "LS crm-wh,tan,crpxl-micxl,arg-chk ip,occ sl alg,slty ip,vdol,chtly-scat clr CHT frag,tr thn dkgy-blk v dol-calc sl slty tt-tr intxl- alg POR,tr-fr dull-bri yel FLOR,rr-tr spty ltbrn STN,tr-fr slow-mod fast strmg cut,grdg to lmy DOL "
5580.00	5590.00 "DOL ltbrn-brn,mbrn ip,micxl-vfxl,gran-micsuc pred GRNST,sl lmy,v sl arg,tr trnsf-bf CHT frag,occ ANHY xl-incl,fr-g intxl POR,fr-g dull yel FLOR,tr-fr brn STN,fr-g mod fast stmg CUT,w/v rr scat crm-tan crpxl rthy tt LS lams,scat Crin fos"
5590.00	5600.00 "DOL AA,scat ANHY xl-rr Crin fos,occ bcmg PKST,sl decr POR,FSOC AA,sl decr LS "
5600.00	5620.00 "DOL ltbrn-brn,mbrn ip,micxl-vfxl,gran-micsuc pred GRNST,occ PKST,sl lmy,v sl arg,tr trnsf-bf CHT frag,occ ANHY xl-incl,rr scat Crin fos,tr-g intxl POR,fr-g dull yel FLOR,fr brn STN,fr-g mod fast stmg CUT,w/v rr scat crm-tan crpxl rthy tt LS lams(pos cvg)"
5620.00	5630.00 "DOL AA,sl decr POR,FLOR-STN-CUT AA,w/ABNT LS frag-PRED CVGS"
5630.00	5640.00 "DOL ltbrn-brn,mbrn-dkbrn,micxl-vfxl,gran-micsuc pred GRNST,occ PKST,sl lmy,v sl arg,tr trnsf-bf CHT frag,occ ANHY xl-incl,rr scat Crin fos,tr-g intxl POR,fr-g dull yel FLOR,fr brn STN,fr-g mod fast stmg CUT,w/v rr scat crm-tan crpxl rthy tt LS lams"
5640.00	5650.00 "DOL AA / incrs LS & PKST"
5650.00	5660.00 "DOL m-dkbrngybrn,frm-hd,micxl-crpxl,lmy ip,anhy,tt,xl incl,arg ip,cht frags,vsl suc ip,dull yel FLOR / mod strmg CUT"
5660.00	5670.00 "LS wh-ltgy-crm,mfrm-frm,micxl-crpxl,chkyl,dns,tt,dol,occ clr cht,xl anhy,DOL m-dkbrn,ltbrn-gybrn,micxl-crpxl,suc,lmy,xl incl,mod POR,yel FLOR/brn STN & mod strmg CUT"

DEPTH	LITHOLOGY
5670.00	5680.00 "LS AA"
5680.00	5690.00 "DOL ltbrn-brn,mbrn-dkbrn,micxl-vfxl,gran-micsuc,PKST,lmy,sl arg,tr trnsl-bf CHT frag,occ ANHY xl-incl,tr-g intxl POR,fr-g dull yel FLOR,fr brn STN,fr-g mod fast stmg CUT,w/v rr scat crm-tan crpxl rthy tt LS lams"
5690.00	5700.00 "LS wh-ltgy-crm,mfrm-frm,micxl-crpxl,chky,dns,tt,dol ip,tr clr cht,sl slty ip,xl anhy,yel FLOR/brn STN & mod strmg CUT"
5700.00	5710.00 "LS wh-ltgy-crm,mfrm-frm,micxl-crpxl,chky,dns,tt,dol,occ clr cht,xl anhy,DOL m-dkbrn,ltbrn-gybrn,micxl-crpxl,suc,lmy,xl incl,mod POR,yel FLOR/brn STN & mod strmg CUT"
5710.00	5720.00 "LS wh-ltgy-crm,mfrm-frm,micxl-crpxl,chky,dns,tt,sl dol ip,tr clr cht,sl slty ip,xl anhy,yel FLOR/brn STN & mod strmg CUT"
5720.00	5730.00 "LS wh-ltgy-crm,mfrm-frm,micxl-crpxl,chky,dns,tt,vsl dol ip,pred cln,tr clr cht,sl slty ip,xl anhy,yel FLOR/brn STN & mod strmg CUT"
5730.00	5740.00 "LS wh-ltgy-crm,mfrm-frm,micxl-crpxl,chky,dns,tt,vsl dol ip,pred cln,tr clr cht,sl slty ip,xl anhy,yel FLOR/brn STN & mod strmg CUT"
5740.00	5750.00 "LS wh-crm,ltgy-tan,crpxl,micxl ip,pred cln dns sl plty PKST-WKST,v sl dol,v rr trnsl CHT frag,tt,NFSOC,w/v rr scat brn DOL GRNST frag-prob CVGS"
5750.00	5760.00 "LS AA,pred PKST,scat ANHY xl-incl,v rr micxl,scat CHT frag,n-v rr intxl POR,NFSOC"
5760.00	5770.00 "LS wh-crm,ltgy,occ tan,crpxl-micxl,rthy-chk,occ chty,pred PKST,scat ANHY xl-incl,scat trnsl-clr CHT,v sl dol,dns-tt,NFSOC"
5770.00	5780.00 "LS AA,incr tan,incr micxl-v sl gran,abnt ANHY xl-incl,tt-rr intxl-poss frac POR,n-v rr mnrl-v rr fnt dull yel FLOR,v rr spty blk dd o STN,n-v rr p slow dif-resid ring CUT"
5780.00	5790.00 "LS AA,n-v rr intxl POR,NFSOC"
5790.00	5800.00 "LS wh-crm,ltgy,occ tan,crpxl-micxl,v rr gan stks,rthy-chk,occ chty,plty ip,pred PKST w/v rr v thn GRNST lams,sl dol,scat ANHY xl-incl,tr trnsl-clr CHT,pred dns-tt,v rr intxl-frac POR,n-v rr fnt dull yel-v rr mnrl FLOR,n vis STN,n-v p fnt resid ring CUT"
5800.00	5810.00 "LS AA,pred PKST,v rr frac POR,n-v rr v spty fnt FLOR-STN-CUT"
5810.00	5820.00 "LS wh-crm-tan,ltgy ip,pred PKST AA,scat trnsl-clr CHT frag,scat ANHY xl-incl,n-v rr frac POR,n-v rr spty dull yel FLOR,n-v rr spty blk dd o STN,n-v p slow dif-resid ring CUT"
5820.00	5830.00 "LS AA,w/v rr v thn brn-mbrn micxl-vfxl sl lmy DOL GRNST incl,v sl anhy,fr-g intxl POR,tr bri yel FLOR,rr fr-g mod fast stmg CUT"
5830.00	5840.00 "LS wh-crm,tan-ltgy ip,crpxl-micxl,pred sichky v sl dol anhy PKST,w/thn lmy v sl alg DOL GRNST AA,tr intxl-v rr vug POR,tr dull-bri yel FLOR,fr ltbrn-brn STN,tr g mod fast stmg CUT"

DEPTH	LITHOLOGY
5840.00	5850.00 "DOL brn-mbrn,occ ltbrn,micxl-vfxl,gran-micsuc,alg ip,pred GRNST,w/occ ANHY fl frac-vug POR,fr-g dull-bri yel FLOR,fr-g intxl-tr alg POR,fr-g mbrn STN,g mod fast stmg CUT,w/thn LS PKST AA"
5850.00	5860.00 "DOL AA,incr GRNST-sl alg,POR-FLOR-STN-CUT AA,decr LS incl AA-prob CVGS"
5860.00	5880.00 "DOL ltbrn-brn,rr mbrn,micxl-vfxl,gran-micsuc,v rr crpxl,sl alg,pred GRNST,sl anhy-v rr ANHY xl-incl,v rr fos frag,fr-g intxl-sl alg POR,fr-g dull-bri yel FLOR,fr-g brn STN,rr blk dd o STN,fr-g mod fast stmg CUT,v rr scat LS PKST CVGS"
5880.00	5890.00 "DOL AA,POR-FLOR-STN-CUT AA,rr scat LS PKST CVGS"
5890.00	5900.00 "DOL ltbrn-brn,rr mbrn,micxl-vfxl,gran-micsuc,v rr crpxl,sl alg,pred GRNST,sl anhy-v rr ANHY xl-incl,v rr fos frag,fr-g intxl-sl alg POR,fr-g dull-bri yel FLOR,fr-g brn STN,rr blk dd o STN,fr-g mod fast stmg CUT,v rr scat LS PKST CVGS"
5900.00	5910.00 "DOL AA,w/scat Crin fos,POR-FLOR-STN-CUT AA,scat wh-crm-tan,ltgy ip,crpxl,sl dol grdg to v dol LS PKST,tt,NFSOC"
5910.00	5920.00 "DOL AA,w/incr Crin fos,occ crpxl lmy DOL PKST frag,w/LS PKST AA "
5920.00	5940.00 "LS crm-tan,occ wh,crpxl-micxl,v sl gran,dol ip,pred PKST,chy-scat trnscl-clr CHT frag,rr mic fos,anhy ip,NFSOC,w/brn-mbrn,occ ltbrn,micxl-vfxl,gran-micsuc,pred GRNST,sl lmy,rr ANHY xl-incl,tr Crin fos,tr-fr intxl POR,tr-fr bri yel FLOR,tr brn STN,g CUT"
5940.00	5950.00 "LS AA,pred dol-anhy chy PKST,incr DOL GRNST AA,incr Crin fos,tr-fr intxl POR,tr-fr dull-bri yel FLOR,fr ltbrn STN,v rr spty blk dd o STN,fr-g slow-mod fast stmg CUT"
5950.00	5960.00 "LS wh-crm-tan,occ ltgy,crpxl-micxl,dns,dol,tr Crin-Gast fos,anhy-ANHY fl POR,tt-v rr intxl-sl alg POR,rr spty dull yel FLOR,rr spty ltbrn-blk STN,tr slow dif-slow stmg CUT,w/intbd Crin lmy DOL GRNST AA,POR-FLOR-STN-CUT AA"
5960.00	5980.00 "DOL ltbrn-brn,rr mbrn,micxl-vfxl,gran-suc,sl alg,pred GRNST,scat Crin fos,fr-g intxl-tr alg POR,fr dull-bri yel FLOR,fr ltbrn-brn STN,fr-g mod fast stmg CUT,w/thn intbd crm-tan crpxl-micxl,sl alg LS PKST & v thn LS GRNST POR-FLOR-STN-CUT AA"
5980.00	5990.00 "PRED intbd lmy sl alg DOL GRNST & dol v sl alg LS GRNST,tr-g intxl-v rr alg POR,fr-g dull-bri yel FLOR,fr ltbrn-brn STN,v rr blk dd o STN,fr-g mod fast stmg CUT"
6000.00	6020.00 "INTBD alg LS & DOL GRNST,scat rr Crin fos,v rr trnscl-clr CHT frag,thn scat crm-tan LS PKST incl,w/fr-g intxl-sl alg POR,fr FLOR-STN-CUT AA"
6020.00	6040.00 "DOL ltbrn-mbrn,micxl-vfxl,gran,micsuc-suc ip,alg ip,pred GRNST,occ anhy,lmy ip,fr-g intxl-sl alg POR,fr dull-bri yel FLOR,fr-g brn-v rr blk STN,fr-g mod fast CUT,grdg to crm-tan-ltbrn crpxl-vfxl dol LS GRNST & thn LS PKST incl anhy w/POR-FLOR-STN-CUT AA "
6040.00	6056.00 "LS crm-tan,occ wh,crpxl-micxl,v sl gran,dol ip,occ PKST,chy-scat trnscl-clr CHT frag,rr mic fos,anhy ip,NFSOC,w/brn-mbrn,occ ltbrn,micxl-vfxl,gran-micsuc,pred GRNST,sl lmy,rr ANHY xl-incl,tr Crin fos,tr-fr intxl POR,tr-fr yel FLOR,tr brn STN,g CUT"

DEPTH	LITHOLOGY
6058.00 6060.00	"LS AA"
6061.00 6072.00	"DOL ltbrn-mbrn,micxl-vfxl,gran,micsuc-suc ip,alg ip,pred GRNST,occ anhy,lmy ip,fr-g intxl-sl alg POR,fr dull-bri yel FLOR,fr-g brn-v rr blk STN,fr-g mod fast CUT,grdg to crm-tan-ltbrn crpxl-vfxl dol LS GRNST & thn LS PKST incl anhy w/POR-FLOR-STN-CUT AA "
6082.00 6101.00	"DOL ltbrn-mbrn,micxl-vfxl,gran,micsuc-suc ip,alg ip,pred GRNST,occ anhy,lmy ip,fr-g intxl-sl alg POR,fr dull-bri yel FLOR,fr-g brn-v rr blk STN,fr-g mod fast CUT,grdg to crm-tan-ltbrn crpxl-vfxl dol LS GRNST & thn LS PKST incl anhy w/POR-FLOR-STN-CUT AA "
6100.00 6111.00	"LS crm-tan,occ wh,crpxl-micxl,v sl gran,dol ip,occ PKST,chtly-scat trnscl-clr CHT frag,rr mic fos,anhy ip,NFSOC,w/brn-mbrn,occ ltbrn,micxl-vfxl,gran-micsuc,pred GRNST,sl lmy,rr ANHY xl-incl,tr Crin fos,tr-fr intxl POR,tr-fr yel FLOR,tr brn STN,g CUT"
6118.00 6130.00	"TR CVGS AFTER TRIP" "LS crm-tan,occ wh-ltgy,crpxl-vfxl,occ micsuc,pred PKST w/thn dol-v sl alg GRNST,rr ANHY xl-incl-trnscl CHT frag,tt-rr intxl-v sl alg POR,rr dull yel FLOR,n-v p STN,tr slow dif-v slow stmg CUT,thn intbd DOL GRNST,v lmy,decr intxl-arg POR,rr FLOR-STN-CUT"
6130.00 6150.00	"LS crm-tan,ltgy,occ wh,crpxl-micxl,rthy-chk,occ plty,pred v sl fos PKST,v rr v thn GRNST,v anhy,tt-v rr intxl POR,n-v rr FLOR-STN-CUT,v rr thn brn DOL GRNST incl,rr dull yel FLOR,tr brn STN,v p intxl-v rr alg POR,rr fr slow-mod fast stmg CUT"
6150.00 6170.00	"LS crm-tan,ltgy,occ wh,crpxl-micxl,rthy-chk,occ plty,pred v sl fos PKST,v rr v thn GRNST,v anhy-dol ip,tt-v rr intxl POR,n-v rr spty dull yel FLOR,n-v rr dkbrn-blk STN,n-v rr v p slow dif CUT,w/v rr v thn v lmy DOL GRNST lams AA"
6170.00 6180.00	"LS AA,pred dns tt,sl arg-dol,plty PKST,v rr v thn GRNST stks,n-v rr v thn DOL GRNST lams AA,POR-FLOR-STN-CUT AA"
6180.00 6200.00	"LS tan-crm,occ wh-ltgy-ltbrn,crpxl-micxl,arg,rthy,chk,y,pred sl plty-v sl fos PKST,dol,occ grdg to v lmy arg DOL GRNST-sl anhy,tt-v rr intxl-frac POR,n-v rr spty dull yel FLOR,n-v rr spty blk STN,n-v p slow dif CUT"
6200.00 6210.00	"LS AA,incr dol,bcmg v lmy arg DOL GRNST-tr fr intxl-v sl alg POR,tr dull-bri yel FLOR,rr-tr ltbrn-v rr blk STN,tr g mod fast CUT"
6210.00 6230.00	"LS wh-crm-tan,crpxl-micxl,anhy-v anhy-tr ANHY xl-incl,bcmg pred brn-mbrn micxl-vfxl gran-micsuc alg ip DOL GRNST w/tr-fr intxl-rr alg POR tr dull-bri yel FLOR rr ltbrn-blk STN fr slow-mod fast stmg CUT"
6230.00 6250.00	"LS crm-tan,occ wh,crpxl-micxl,v rr vfxl,pred dns plty PKST-w/v rr thn dol GRNST,scat ANHY xl-incl,rr CHT frag,tt-v rr intxl POR,rr spty dull yel FLOR,rr spty brn-blk STN,v rr slow CUT,w/thn intbd ltbrn-brn micxl,occ vfxl v lmy DOL GRNST,sl anhy,POR-FLOR- STN-CUT AA "
6250.00 6270.00	"LS AA,incr DOL GRNST-ltbrn-brn,micxl,vfxl-gran ip,v anhy,v lmy,occ grdg to dol LS,v rr mic fos,occ ANHY fl POR,tr intxl-v rr alg POR,tr-fr dull-rr bri yel FLOR,tr ltbrn STN,v rr spty blk dd o STN,rr-tr g slow-mod fast stmg CUT"

DEPTH	LITHOLOGY
6270.00 6280.00	"LS pred v dol PKST & v thn arg GRNST AA,w/v thn intbd DOL GRNST AA,FLOR-STN-CUT AA"
6280.00 6290.00	"LS crm-tan,occ wh,crpxl-micxl,v rr vfxl,pred dns plty PKST-w/v rr thn dol GRNST,scat ANHY xl-incl,rr CHT frag,tt-v rr intxl POR-pred ANHY fl,n-v rr spty dull yel FLOR,n-v rr spty STN,v rr slow dif CUT,w/v rr thn DOL GRNST decr POR-FLOR-STN CUT"
6290.00 6300.00	"LS AA"
6300.00 6310.00	"LS crm-tan,occ wh,crpxl-micxl,v rr vfxl,pred dns plty PKST-w/v rr thn dol GRNST,scat ANHY xl-incl,rr CHT frag,tt-v rr intxl POR-pred ANHY fl,n-v rr spty dull yel FLOR,n-v rr spty STN,v rr slow dif CUT,w/v rr thn DOL GRNST POR-FLOR-STN CUT"
6310.00 6320.00	"LS AA/INCRS DOL"
6320.00 6330.00	"LS crm-tan,occ wh,crpxl-micxl,v rr vfxl,pred dns plty PKST-w/v rr thn dol GRNST,scat ANHY xl-incl,rr CHT frag,tt-v rr intxl POR-pred ANHY fl,n-v rr spty dull yel FLOR,n-v rr spty STN,v rr slow dif CUT,w/v rr thn DOL GRNST POR-FLOR-STN CUT"
6330.00 6340.00	"LS AA"
6340.00 6360.00	"LS crm-tan,wh-ltgy,crpxl-micxl,v rr vfxl,pred dns plty PKST-w/thn dol GRNST,scat ANHY xl-incl, CHT frag,tt,intxl POR-pred ANHY fl,rr spty dull yel FLOR,spty STN,slow dif CUT,thn DOL GRNST yel flor/N STN&strmg CUT"
6360.00 6380.00	"LS crm-tan,wh-ltgy,crpxl-micxl,v rr vfxl,dns plty PKST-w/thn dol GRNST,scat ANHY xl-incl, CHT frag,tt,intxl POR-pred ANHY fl,rr spty dull yel FLOR,spty STN,slow dif CUT,thn DOL GRNST yel flor/N STN&strmg CUT"
6380.00 6390.00	"DOL lt-mbrn,gybrn,trnsl,frm,micxl-crpxl,lmy,slty,tr cht,occ fos frags,fr intxl por,intbd LS,bri yel flor/fnt brn stn & mod strmg cut & yel resd ring"
6391.00 6400.00	"DOL lt-mbrn,gybrn,trnsl,frm,micxl-crpxl,lmy,slty,tr cht,occ fos frags,fr intxl por,intbd LS,bri yel flor/fnt brn stn & mod strmg cut & yel resd ring"
6403.00 6415.00	"DOL lt-mbrn,gybrn,trnsl,frm,micxl-crpxl,lmy,slty,tr cht,occ fos frags,fr intxl por,intbd LS,bri yel flor/fnt brn stn & mod strmg cut & yel resd ring,LS PKSTN (poss cvgs)"
6425.00 6433.00	"DOL lt-mbrn,gybrn,trnsl,frm,micxl-crpxl,lmy,slty,tr cht,occ fos frags,fr intxl por,suc,bri yel flor/fnt brn stn & mod strmg cut & yel resd ring,LS PKSTN (poss cvgs)"
6443.00 6455.00	"DOL lt-dkbrn,gybrn,trnsl,frm,micxl-crpxl,suc,lmy,slty,occ carb frags,tr cht,occ fos frags,fr intxl por,intbd LS,bri yel flor/fnt brn stn & mod strmg cut & yel resd ring"
6463.00 6475.00	"DOL lt-dkbrn,gybrn,trnsl,frm,micxl-crpxl,suc,sl lmy,slty,occ carb frags,tr cht,occ fos frags,fr intxl por,bri yel flor/fnt brn stn & mod strmg cut & yel resd ring"
6483.00 6494.00	"DOL lt-dkbrn,gybrn,trnsl,frm,micxl-crpxl,suc,lmy,slty,occ carb frags,tr cht,occ fos frags,fr intxl por,intbd LS,bri yel flor/fnt brn stn & mod strmg cut & yel resd ring"

DEPTH	LITHOLOGY
6504.00 6516.00	"DOL lt-dkbrn,gybrn,trnsl,frm,micxl-crpxl,suc,sl lmy,slty,occ carb frags,tr cht,occ fos frags,fr intxl por,bri yel flor/fnt brn stn & mod strmg cut & yel resd ring"
6523.00 6539.00	"DOL lt-mbrn,gybrn,trnsl,frm,micxl-crpxl,lmy,slty,tr cht,occ fos frags,fr intxl por,suc,bri yel flor/fnt brn stn & mod strmg cut & yel resd ring,LS PKSTN (poss cvgs)"
6543.00 6557.00	"DOL lt-dkbrn,gybrn,micxl-vfxl,gran-micsuc,lmy,pred GRNST,tr trnsl-clr CHT frag,rr Crin fos,fr intxl POR,fr bri yel FLOR,fr-g brn STN,fr-g mod fast strmg-resd ring CUT,thn scat tan-crm crpxl LS PKST-t,NFSOC"
6560.00 6580.00	"DOL lt-mbrn,brn,micxl-vfxl,v rr crpxl,gran-micsuc,rr suc,sl alg,pred GRNST,scat ANHY xl-incl & trnsl CHT frag,v rr Crin fos,lmy ip,fr-g intxl-tr alg POR,fr-g dull-bri yel FLOR,g lt-dkbrn-rr blk dd o STN,fr slow-rr mod fast stmg CUT,w/scat LS PKST,dns,tt"
6580.00 6600.00	"DOL AA,pred GRNST,w/v sl incr ANHY,incr lmy ip,v sl decr POR,FLOR-STN-CUT AA,decr LS crm-tan-wh,occ ltgy,crpxl-micxl,dol,v rr mic fos,pred v sl plty PKST,chk ip,dns,tt,NFSOC,w/scat trnsl-clr,bf ip CHT frag"
6600.00 6620.00	"DOL m-dkbrn,occ ltbrn,micxl-vfxl,gran-micsuc,occ alg,pred sl lmy GRNST,AA,w/POR-FLOR-STN-CUT AA,v rr scat crm-ltbrn rr wh dol LS PKST dns tt NFSOC"
6620.00 6640.00	"DOL lt-mbrn,brn,micxl-vfxl,v rr crpxl,gran-micsuc,rr suc,sl alg,pred GRNST,scat ANHY xl-incl & trnsl CHT frag,v rr Crin fos,lmy ip,fr-g intxl-tr alg POR,fr-g dull-bri yel FLOR,g lt-dkbrn-rr blk dd o STN,fr slow-rr mod fast stmg CUT,w/v rr LS PKST frag"
6640.00 6660.00	"DOL AA,pred GRNST,w/POR-FLOR-STN-CUT AA,w/v rr scat LS PKST frag"
6660.00 6680.00	"DOL AA,pred GRNST,w/v sl incr ANHY,incr lmy ip,v sl decr POR,FLOR-STN-CUT AA,incr tr LS crm-tan-wh,occ ltgy,crpxl-micxl,dol,v rr mic fos,pred v sl plty PKST,chk ip,dns,tt,NFSOC,w/scat trnsl-clr,bf ip CHT frag"
6680.00 6700.00	"DOL lt-dkbrn,gybrn,micxl-vfxl,gran-micsuc,v lmy,pred GRNST,tr trnsl-clr CHT frag,v rr Crin fos,fr-g intxl-sl alg POR,g bri-dull yel FLOR,fr-g brn-rr STN,fr-g mod fast strmg-resd ring CUT,tr scat tan-crm crpxl LS PKST-v sl mic fos dol-sl anhy ip tt NFSOC"
6700.00 6720.00	"DOL AA,pred GRNST,w/v sl incr ANHY,incr lmy ip,v sl decr POR,FLOR-STN-CUT AA,decr LS crm-tan-wh,occ ltgy,crpxl-micxl,dol,v rr mic fos,pred v sl plty PKST,chk ip,dns,tt,NFSOC,w/scat trnsl-clr,bf ip CHT frag"
6720.00 6740.00	"DOL lt-mbrn,brn,micxl-vfxl,gran-micsuc,rr suc,sl alg,pred GRNST,scat ANHY xl-incl & trnsl CHT frag,v rr Crin fos,sl lmy,fr-g intxl-tr alg POR,fr-g dull-bri yel FLOR,fr-g lt-dkbrn STN-v rr blk dd o STN,fr slow-rr mod fast stmg CUT,w/v rr tan LS PKST frag"
6740.00 6760.00	"DOL m-dkbrn,occ brn-ltbrn,micxl-vfxl,gran-micsuc,occ suc,sl alg,pred GRNST,v rr ANHY xl-incl,v lmy ip,rr trnsl-wh CHT frag,v rr dns crm-tan sl dol v rr mic fos LS PKST frag,fr-g intxl-tr alg POR,fr-g dull-bri yel FLOR,fr-g m-dkbrn-rr blk STN,g fast CUT"
6760.00 6780.00	"DOL AA,w/v rr dns tt LS PKST frag,POR-FLOR-STN-CUT AA"

DEPTH	LITHOLOGY
6780.00 6790.00 6780.00 0	"DOL m-dkbrn,occ brn-ltbrn,micxl-vfxl,gran-micsuc,occ suc,sl alg,pred GRNST,AA,POR-FLOR-STN-CUT AA,w/v rr thn scat LS PKST & CHT frag AA"
6790.00 6810.00	"DOL lt-dkbrn,gybrn,micxl-vfxl,gran-micsuc,v lmy,pred GRNST,tr trnsl-clr CHT frag,v rr Crin fos,fr-g intxl-sl alg POR,g bri-dull yel FLOR,fr-g brn-rr STN,fr-g mod fast strmg-resd ring CUT,v rr tan-crm crpxl LS PKST-v sl mic fos dol-sl anhy ip tt NFSOC"
6810.00 6830.00	"DOL pred sl alg GRNST AA POR-FLOR-STN-CUT AA,w/v rr scat crm-tan-v rr wh crpxl v sl dol LS PKST w/v rr mic fos v sl anhy dns tt,NFSOC"
6830.00 6850.00	"DOL m-dkbrn-brn,occ ltbrn,micxl-vfxl,gran-micsuc,occ suc,sl alg,pred GRNST,v rr wh-trnsl CHT & crm-tan dns sl dol LS PKST frag,v rr ANHY xl,sl lmy ip,fr-g intxl-tr alg POR,fr-g dull-bri yel FLOR,g lt-dkbrn STN,fr-g mod fast-fast stmg CUT"
6850.00 6870.00	"DOL pred sl alg GRNST AA POR-FLOR-STN-CUT AA,w/v rr scat crm-tan-v rr wh crpxl v sl dol LS PKST w/v rr mic fos v sl anhy dns tt,NFSOC"
6870.00 6890.00	"DOL lt-dkbrn,gybrn,micxl-vfxl,gran-micsuc,v lmy,pred GRNST,tr trnsl-clr CHT frag,v rr Crin fos,fr-g intxl-sl alg POR,g bri-dull yel FLOR,fr-g brn-rr STN,fr-g mod fast strmg-resd ring CUT,v rr tan-crm crpxl LS PKST-v sl mic fos dol-sl anhy ip tt NFSOC"
6890.00 6900.00	"DOL AA,w/tr dns tt LS PKST frag,POR-FLOR-STN-CUT AA"
6900.00 6920.00	"DOL lt-dkbrn,micxl-vfxl,gran-micsuc,sl suc-alg,pred GRNST,v lmy ip-scat crm-tan dns sl dol LS PKST w/v rr mic fos,rr trnsl-clr CHT frag,v rr ANHY xl-incl,fr-g intxl-tr alg POR,fr-g dull-tr bri yel FLOR,fr-g m-dkbrn STN,v rr spty blk dd o STN,g fast CUT"
6920.00 6936.00	"DOL AA,bcmg v anhy-v lmy,scat ANHY fl POR,POR-FLOR-STN-CUT,grdg to v dol sl fos dns LS PKST W/NFSOC,rr scat trnsl-clr CHT frag"

FORMATION TOPS

OPERATOR: MOBIL

WELL NAME: RATHERFORD UNIT #1-34 SE 1-A HORIZONTAL LATERAL LEG #1

FORMATION NAME		SAMPLES MEASURED DEPTH	SAMPLES TRUE VERTICAL DEPTH	DATUM KB:4624'
LOWER ISMAY		5414'	5406'	-782'
GOTHIC SHALE		5478'	5453'	-829'
DESERT CREEK		5497'	5464'	-840'
DC 1-A ZONE		5505'	5468'	-844'
DC 1-B ZONE		5527'	5478'	-854'
DC 1-C ZONE		5544'	5486'	-862'
DC 1-D ZONE		5571'	5494'	-870'

GEOLOGICAL SUMMARY

AND

ZONES OF INTEREST

The Mobil Exploration and Production U.S. Inc., Ratherford Unit #1-34 Southeast Horizontal Lateral Leg 1 was a re-entry of the Mobil Ratherford Unit #1-34 located in Section 1, T41S, R23E. The southwest Lateral Leg #1 was begun on October 6, 1997. The curve section was completed on October 9, 1997 at a measured depth of 5620', 5501' true vertical depth, and the lateral section was begun in the 1-D porosity zone. The lateral reached a measured depth of 6936' true vertical depth of 5477', with a horizontal displacement of 1500' and true vertical plane of 133.9 degrees, on October 12, 1997, in the upper Desert Creek 1-D zone. The only minor problem encountered while drilling the lateral, were two failures of the MWD tool while drilling the curve and lateral sections. There were no water and a very minor oil flow noted while drilling the lateral section. This lateral used fresh water and then an oil and water emulsion with polymer sweeps as the drilling fluid. The background gases noted on the accompanying mud log were moderately high through out the lateral section. The samples had good oil shows in the 1-D porosity drilled in the lateral, with the shows decreasing as the well path approached and penetrated tight limestones above and below the porosity zone.

The primary objectives of the Ratherford Unit #1-34 Leg 1 horizontal lateral were the effective porosity, staining and reservoir properties in 1-D zone of the Desert Creek Member of the Upper Paradox Formation. The lower 2/3 of the Upper Ismay, the entire Lower Ismay, Gothic Shale, and transition zone at the top of the Desert Creek were drilled during the curve section of the lateral. Kick off point for this lateral was 5315', measured depth and 5314.6' true vertical depth, in the Upper Ismay member of the Paradox Formation.

The Upper Ismay seen in the curve section of this well was predominately white to tan, occasionally cream to light gray, cryptocrystalline to microcrystalline, chalky to clean and slightly argillaceous to occasionally silty limestone with scattered anhydrite crystals and occasional fracture filling, with translucent to brown to smoky gray and a few dark brown chert fragments and occasional fossil remnants. Also present were thin, slightly marly to argillaceous, gray brown to dark brown, cryptocrystalline to microcrystalline, slightly calcareous dolomites, also very thin dark gray to black, carbonaceous, slightly calcareous to dolomitic shales and some very thin, gray, very limy siltstone inclusions to laminations near the base. While drilling the lower Upper Ismay, there was only very slight fracture porosity noted with no visible fluorescence, stain or cut noted. No gas increases were noted. The very dolomitic limestones at the base of the Upper Ismay were graded in to the very thin, carbonaceous, dolomitic shale of the Hovenweep.

The top of the Lower Ismay was picked at 5414' measured depth, 5406' true vertical depth, at the base of the Hovenweep Shale. The Lower Ismay was predominately limestone, which was tan to cream to white, occasionally light gray to brown, some dark brown, cryptocrystalline to microcrystalline, dense, chalky, occasionally argillaceous, slightly dolomitic and anhydritic with scattered brown to dark brown to black chert and very rare fossil remnants. Rare scattered intercrystalline porosity was noted, with very minor traces of stain, fluorescence or cut was seen. Scattered throughout the Lower Ismay were thin interbedded dark brown to brown, limy, microcrystalline, shaley, argillaceous dolomites and dark gray to gray, calcareous to slightly dolomitic, micaceous shales. In the top 30' of the Lower Ismay were very thin light gray to cream,

very limy, slightly micaceous siltstones inclusions and partings. These siltstones have been noted in other wells in this area in the basal Upper Ismay to Lower Ismay zones. The siltstone is the remnant of a slump feature from a higher platform to the east, present during middle Lower Ismay to early Upper Ismay deposition. The lower most portion of the Lower Ismay, just above the Gothic Shale, were very thin light gray to cream to white limestone, cryptocrystalline to microcrystalline, chalky, anhydritic, dolomitic, and predominately light brown to gray brown, very shaley, cryptocrystalline to microcrystalline dolomite and dark gray to black, calcareous to dolomitic, carbonaceous shales. The thinly interbedded limestones and dolomites at the base of the Lower Ismay graded in to the shales of the Gothic. Only minor sample shows were noted in the through out the Lower Ismay in thin intercrystalline porosity in the limestones, but had no significant gas shows.

The top of the Gothic Shale was picked at 5478' measured depth, 5453' true vertical depth and was predominantly gray to dark gray to black, silty, carbonaceous, soft to moderately firm, calcareous to slightly dolomitic and slightly micaceous. Scattered within the Gothic were very thin, cryptocrystalline to microcrystalline, earthy, limestone and dolomite partings and inclusions, with very rare scattered anhydrite crystals. The top of the Gothic is rather gradational. The drill time slowed as the top of the Gothic was penetrated and then drilled very erratically though out the middle of Gothic Shale. The top of the Gothic was picked predominantly from the slight increase in shale in the samples and the decrease in penetration rate. The increase in shale at the top of the Gothic was quite subtle, followed by a gradual increase in shale content in the samples.

The top of the Desert Creek is commonly picked at the Gothic Shale to transition zone facies change, which in occurred at a measured depth of 5497' and a true vertical depth of 5464', and was marked by a very slight increase in penetration rate. In this well the zone was interbedded cream to tan, some brown, slightly silty to very silty, argillaceous, dolomitic limestones, which were cryptocrystalline to microcrystalline, and tan to light brown, cryptocrystalline to microcrystalline, argillaceous in part, limy dolomite. Within the limestones and dolomites were very thin dark gray to black, dolomitic to calcareous shale and rare very limy, very thin siltstone parting were noted in the transition zone section. The limestones and dolomites had very rare intercrystalline porosity, with a trace stain, fluorescence and cut.

The top of the Desert Creek 1-A zone was picked at 5505' measured depth, 5468' true vertical depth and was based primary on sample identification as there was no significant increase in the penetration rate. The top of the 1-A zone was approximately 3' high to the top on the porosity log for the 1-34 well. The 1-A zone in this curve section was a very slightly algal, predominately clean to dense, slightly anhydritic limestone packstone with very rare, very thin grainstone streaks. This limestone had a slightly dolomitic cement and had minor traces of a very limy, light to medium brown, dolomite grainstone with a limestone rich cement, with scattered through out were translucent to clear, occasionally buff chert fragments. Of note was the lack of significant porosity, as noted on the electric logs. Through out the 1-A zone were very thin streaks of intercrystalline porosity, with only minor sample shows. The base of the 1-A graded into the 1-B zone with no significant change in penetration rate or lithology.

The 1-B zone of the Desert Creek was picked at a measured depth of 5527', with a true vertical depth of 5468', primarily on interval and the occurrence of a very tight dense limestone with no visible porosity and no noticeable gas increases. The limestones were cream to white, occasionally tan, cryptocrystalline to microcrystalline, very slightly argillaceous to chalky, dense, very slightly platy, cherty limestone packstone. This limestone had no visible porosity, and with no sample shows.

The 1-C zone was picked at a measured depth of 5544', 5486' true vertical depth, just above two thin streaks of dolomite grainstone porosity. The top of the 1-C zone was a very tight, slightly dolomitic limestone packstone. There were two thin streaks of brown to dark gray brown, micro to very finely crystalline, limy, slightly algal dolomite grainstones. These dolomites had fair to good intercrystalline to algal porosity, with a fair sample show. The porosity zone was only 3' thick and was split into two very thin zones. The upper was approximately 1 1/2 foot thick and the lower was just under 1 foot thick, with a tight streak of approximately 1 foot thick separating the upper and lower zones. This middle zone was predominately a very tight limestone packstone. The dolomite grainstones had very thin scattered chert fragments and anhydrite streaks.

The sample top of the 1-D zone was picked at a measured depth of 5571', 5494' true vertical depth, in very thin interbedded dolomitic limestone packstone and very limy dolomite packstones with some very thin dolomite grainstones. The top of the best porosity of the 1-D zone was picked at 5575' measured depth, with a true vertical depth of 5595', at the top of a light to medium brown, micro to very finely crystalline, microsugrosic, slightly algal dolomite grainstone, with scattered anhydrite crystals and rare scattered chert fragments. These dolomites had fair to good intercrystalline to algal porosities, and a good sample show. The curve section was completed at a measured depth of 5620, 5501' true vertical depth, and a horizontal displacement of 188' in the algal dolomite grainstone porosity. Of note was that the porosity zone was 5' above the porosity zone in the 1-34 well electric log, and the curve was landed 2' above the proposed target line. The lateral section was drilled through out its length in the 1-D zone. The lithology of the 1-D porosity zone through out its length in the lateral remained fairly consistent with very minor variations of porosity type and rock classification being noted.

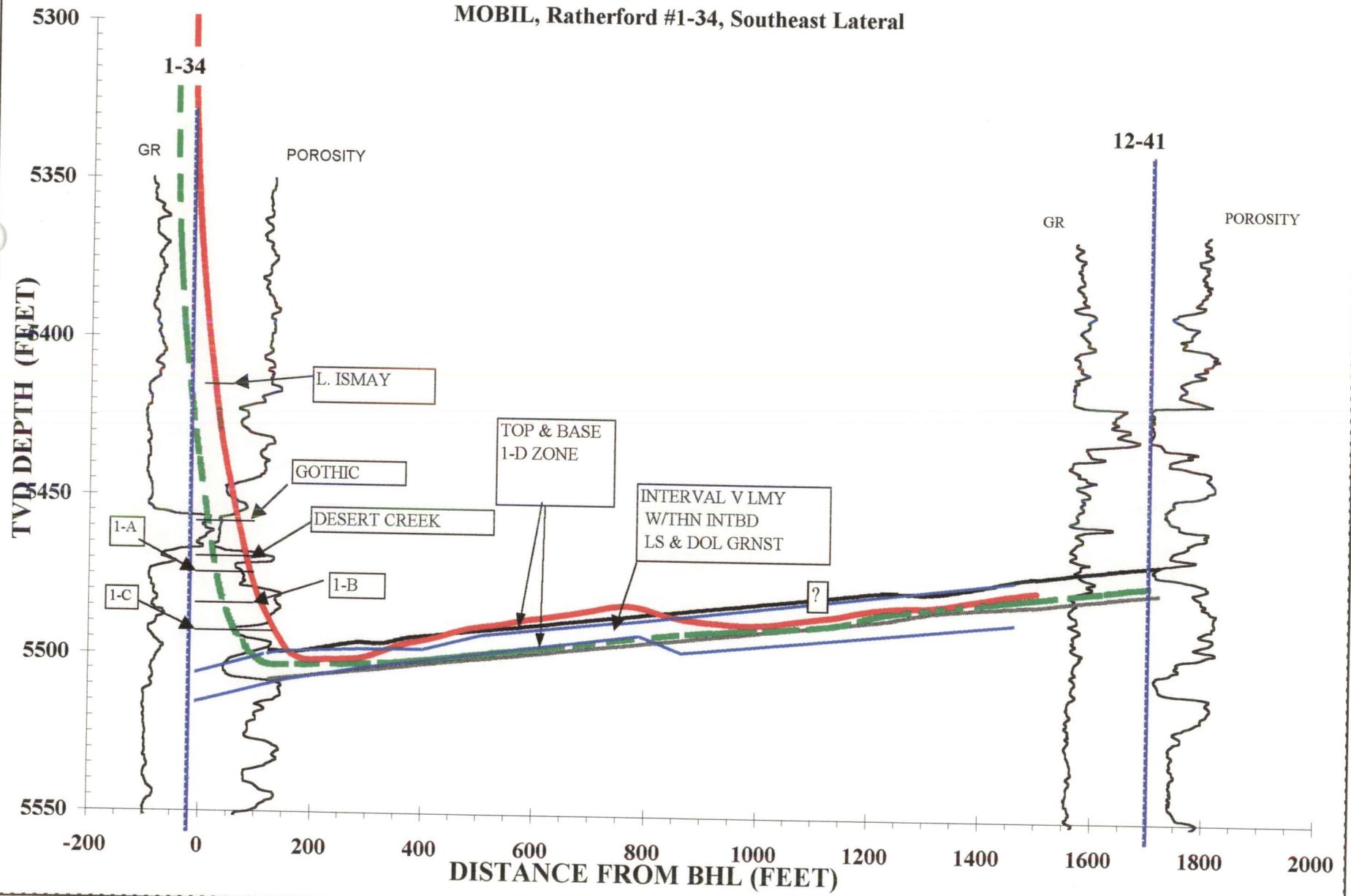
The 1-D porosity zone was a slightly to very algal, light to medium brown, occasionally dark brown, dolomite grainstone, very fine to microcrystalline, with traces of limestone cement, with scattered rare streaks of dolomitic, limestone packstone. The dolomites had good visible porosity and a good sample show. Also noted within the dolomites and very rare thin limestones were occasional anhydrite inclusions and some porosity filling. The base of the 1-D was encountered almost immediately after beginning the lateral section, at a measured depth of 5644', with a true vertical depth of 5501.6' as the lateral was drilled at a slight upward angle. The base of the 1-D zone was a cream to tan, tight, cryptocrystalline, platy limestone packstone, with an scattered chert fragments and a marked decrease in dolomite grainstones and also in visible porosity, as well as a decrease in the sample show. The 1-D algal dolomite grainstone porosity zone was again encountered at a measured depth of 5822', 5495' true vertical depth, with a horizontal displacement of 390', as the well path was drilled at an upward angle. The top of the 1-D porosity zone was encountered several times between 5822' and 6115' (5485' true vertical depth with a horizontal displacement of 682'), at which time the limestone packstones at the top the 1-D zone were shallowly penetrated. The well path was turned downward to regain the good dolomite grainstones. At a measured depth of 6213', 5483' true vertical depth, the porosity zone was again reacquired.

A lateral change in the porosity type was noted at a measured depth of 6213', with a horizontal displacement of 778', as the lateral reentered the top of the best porosity in the 1-D. The change noted was the occurrence of algal limestone grainstones interbedded in the dolomite grainstones, as the lateral continued downward through the porosity zone into the tight limestone packstones at the base of the 1-D, at a measured depth of 6301', 5487' true vertical depth and a horizontal displacement of 868'. The change to predominately algal, very dolomitic limestone grainstone with interbedded very limy, slightly algal dolomite grainstones, and very thin limestone packstones, appeared to occur as the zone thinned over the top of an underlying high. The base of the best porosity zone of the 1-D zone was reacquired at a measured depth of 6350', 5488' true vertical depth, and a horizontal displacement of 905'.

From a measured depth of 6350' to 6936', true vertical depth 5477.3' and a horizontal displacement of 1501', the 1-D porosity zone returned to the very good algal, slightly limy dolomite grainstones, with very rare scattered limestone packstones and appeared to thicken laterally as the well path approached its maximum length. The algal dolomite grainstones were consistent to termination and showed very minor anhydrite inclusions with rare chert fragments. The dolomites had good visible porosity and a good sample show. The well path after regaining the porosity, at 6350' continued at a shallow upward angle of 91.5 to 92 degrees to termination at 6936'. The lateral was terminated at a measured depth of 8936', 5477.3' true vertical depth, and a horizontal displacement of 1501', on October 10, 1997.

In tracking the well bore through the 1-D porosity bench, the algal and intercrystalline porosity was very good with vertical and very minor lateral gradational changes in rock classification, from predominately intercrystalline and algal porosities to tight packstones near the top, and from very good algal and intercrystalline, limy dolomites in the best porosity of the 1-D zone. Sample shows were predominated good and stayed fairly consistent throughout the length of the lateral, except when the lateral neared or penetrated the base and top of the 1-D zone. The background gases increased in the lateral section, after reaching 409' of horizontal displacement, when the lateral reentered the porosity zone from the tight limestone packstones at the base of the 1-D, then maintained a fairly constant increase to the end of the lateral. The effective or better porosity was associated with the algal dolomite grainstone faces, which had fair to good, intercrystalline, and algal porosities. Minor anhydrite plugging was noted throughout. The well produced minor amounts of oil while drilling the 1-D zone.

MOBIL, Ratherford #1-34, Southeast Lateral



DRILLED FOOTAGE CALCULATION FOR DIRECTIONAL AND HORIZONTAL WELLS

Well Name: Ratherford 1-34
Surface Location: 1133 ' FSL, 1980' FEL, Sec. 1, T.

First leg description:	Leg #1
KOP MD:	5308.00
KOP TVD:	5307.65
EOL MD:	6936.00
EOL TVD:	5477.26
Footage drilled:	1628.00

Second leg description:
KOP MD:
KOP TVD:
EOL MD:
EOL TVD:
Footage drilled:

Third leg description:
KOP MD:
KOP TVD:
EOL MD:
EOL TVD:
Footage drilled:

Fourth leg description:
KOP MD:
KOP TVD:
EOL MD:
EOL TVD:
Footage drilled:

Fifth leg description:
KOP MD:
KOP TVD:
EOL MD:
EOL TVD:
Footage drilled:

Total Footage Drilled (MD):	1628.00
Deepest point (TVD):	5501.61

ATTACHMENT - FORM 3160-5
RATHERFORD UNIT - WELL #01-34
14-20-603-246A
NAVAJO TRIBAL
SAN JUAN, UTAH

09-10-97 MOVE PUMPING UT. OFF LOCATION, MIRU NAVAJO WEST #36 PULLING UT. CALLED NAVAJO EPA @ 10:30 ON 9-9-97 TALKED TO ANSWERING MACHINE. INFORMED OF INTENT TO DIG & LINE PIT. CALLED JIM THOMPSON W/BLM AT 09:00 9-30-97. INFORMED HIM OF INTENT TO BEGIN W/O OPERATIONS. OK. UNSET PUMP, POOH & LD RODS, PUMP, GAS ANCHOR. WELL DEAD. UNSET TAC, ND WELLHEAD, NU BOP, POOH LAYING DOWN TBG., 76 JTS LEFT IN HOLE. SWI & SDFN.

09-11-97 FIN POOH W/REMAINING TBG, TAC, BPMA & LD. RU SCHLUMBERGER LOGGERS, RIH W/GR/CCL/CNL TOOL, TAG HIG @ 5352' (PB @ 5469'). POOH, MU MET TOOL, RIH & LOG F/5312'-SURFACE @ 2000 FT/HR. RD SCHLUMBERGER. PU BIT, SCRAPER & BULLDOG BAILER, RIH W/105 JTS 2 7/8" TBG. SD DUE TO LIGHTNING STORM. SWI & SDFN.

09-12-97 FIN TIH W/BIT & BAILER. TAG UP @ 5355'. WORK THRU TIGHT SPOT, FALL THRU TO BOTTOM @ 5480'. POOH & LD 2 7/8" TBG & BAILER. RECOVER 10' FILL. RU HALLIBURTON LOGGERS, RUN CCL/GR LOG F/5350-5100'. RIH & SET CIBP @ 5324'. FILL HOLE W/10# BRINE, PRESSURE UP TO 500 PSI. TEST GOOD F/30 MIN ON CHART. RD LOGGERS, SDFN.

09-13-97 RIH W/2 7/8" TBG. CIRC OIL OFF TOP OF WELL. ND BOP. POOH, LD TBG. CUT OFF 8 5/8" CSG & 5 1/2" CSG. WELD ON NEW CSG HEAD. NU NEW TBG HEAD, TEST TO 1000# OK. RDMO NAVAJO WEST #36. LAST REPORT FOR PREP. WORK.

10-05-97 MIRU NAVAJO WEST RIG #25 NOTIFIED STATE OF UTAH @ 7:00/AM 10-05-97 ABOUT STARTING WELL WORK. FINAL REPORT FOR RE-ENTRY.

10-06-97 NU BOP, PRESS TEST BOP CHOKE 2000# HIGH 250# LOW, RIH W/WHIPSTOCK, RIH W/GYRO, SET WHIPSTOCK ON CIBP @ 5324' W/TOP OF WHIPSTOCK @ 5307'. CUT WINDOW F/5307-5309'.

10-07-97 POOH W/STARTER MILL, TIH W/CSG & WATERMELON MILL. CONT. IN HOLE W/MILLS/PU POWER SWIVEL/PU 2 JNTS. AOHP/BREAD CIRC. MILL ON CSG & CUT WINDOW F/5307.75-5314.15 & 1' FORMATION TO 5315.15. PUMP SWEEP & CIRC. OUT. LAY DN AOHP. TOOH W/MILLS & LAY DOWN SAME. FINAL REPORT / LATERAL #1 WINDOW.

10-07-97 RIH W/CURVE BUILDING ASSY. RU GYRO DATA & RUNNING IN HOLE W/GYRO.

10-08-97 FIN IN HOLE W/GYRO, TIME DRILL F/5317-5450'. HAVING TO KILL DUE TO BUILDING MORE ANGLE THEN NEEDED, LAST SURVEY @ 5415' 34.60 ANGLE, TVD 5407'.

10-09-97 SLIDE/ROTATE DRILL & SURVEY F/5450-5620' (TD CURVE) (AS PER MUD LOGGERS IN ZONE 1-D). LAST SURVEY @ 5595' MD, 81.20 ANGLE, 135.70 AZ, 5499.80 TVD. PROJECTED SURVEY @ 5620' MD, 91 ANGLE, 135.70 AZ., 5501.50 TVD, VERT. SEC. 187.76'. CIRC SWEEP TD CURVE @5620', LD CURVE BUILDING ASSY. PU LAT.

10-10-97 FIH W/LATERAL BUILDING ASSY, SLIDE/ROTATE DRILL/SURVEY F/5620-6040' (LAST SURVEY @ 5977.16 MD, 5489.52 TVD).

10-11-97 SLIDE/ROTATE DRILL & SURVEY F/6040-6305' LATERAL #1A1.

ATTACHMENT - FORM 3160-5
RATHERFORD UNIT - WELL #01-34
14-20-603-246A
NAVAJO TRIBAL
SAN JUAN, UTAH
PAGE 2

- 10-12-97 SLIDE/ROTATE DRILL & SURVEY F/6305-6936' TD LAT. 1A1 IN ZONE 1-D.
(LAST SURVEY @ 6902 MD, 5477.97 TVD, PROJECTED @ BIT 6936 MD &
5477.26 TVD. PUMP SWEEP, START OUT OF HOLE W/DRILL STRING.
- 10-13-97 POOH LAYING DOWN BHA, MWD, MOTOR & BIT. TIH W/RBP & SET @ 5200'.
POOH LAYING DOWN DP & TBG, ND BOP. FLANGE WELL, TEAR DOWN TO MOVE
ROTARY RIG OFF. (FINAL REPORT PENDING COMPLETION).

COMPLETION

- 10-29-97 MIRU NAVAJO WEST RIG #36. SICP @ 10:00 WAS 0 PSI. NIPPLE DOWN WELL
HEAD CAP. NIPPLE UP BOPE. RU PUMP & PIT. PICK-UP RETV HEAD FOR
BRIDGE PLUG. RIH TO 5200' LATCH ONTO BRIDGE PLUG, RELEASE. POH &
LAY DOWN BRIDGE PLUG. SIFN.
- 10-30-97 SICP @ 7:30 WAS 350 PSI. RU, KILL WELL, PICK-UP & RIH W/PH-6 TAIL
PIPE, PKR & 2 7/8" TBG TO 5570.32'. SET PKR @ 5201.55. MIRU COILED
TBG UT. RIG UP PUMP TRUCKS. SIFN.
- 10-31-97 RIG UP & RIH W/1.75" COILED TBG TO 5500'. POOH RIH TO 6936',
ACIDIZE LATERAL #1 F/5571-6936' W/24,612 GALS 15% HCL ACID. POH.
RD. FLOW WELL 3.5 HRS. PH TO 7, SIFN.
- 11-01-97 SITP @ 6:30 WAS 550 PSI. OPEN TO TEST TANK ON .75" CHOKE, RU &
KILL WELL. RELEASE PKR. POOH & LD. RIH W/RETV. TOOLS F/WHIPSTOCK
TO 5310'. LATCH ONTO & RELEASE. POH TO 5301'. COULD NOT ADVANCE,
WORK PIPE. SIFN.
- 11-02-97 SIP @ 7:30 WAS 0 PSI. MIRU WEATERFORD WIRELINE UT. RIH W/CHEM.
CUTTER TO 5276'. COULD NOT CHEM. CUT PIPE. POH RIH W/STRING SHOT
TO 5282'. BACK-OFF @ X/OVER & PH-6 PIPE. POH. RIH W/DRLG COLLARS &
POH STAND BACK. SIFN.
- 11-03-97 SIP @ 7:30 WAS 0 PSI. FISH OUT STUCK WHIPSTOCK.
- 11-04-97 TIH W/OPEN ENDED TBG TOH LAYING DOWN W/S TO SEND TO DRLG RIG PICK
UP MILL SHOE, TIH W/DC'S PICK UP & RUN 2 7/8 DP TO 5245.68' NO TAG
SI & SDFN.
- 11-05-97 NU NEW HYDRIL PU SWIVEL MILL F/N OF 1.80' CIRC CLEAN TOH LD MILL
SHOE PICK UP O/S B/S & ACCEL TIH LATCH ON FISH BEAT DOWN JAR UP
65,000 OVER STRING PULL TO 100 OVER ST WT 59M 7" UPWARD MOVEMENT O
DOWN LEFT W/160,000 PULL, SI, SDFN.
- 11-06-97 WELL DEAD/, RELEASE O/S TOH LD O/S JARS B/S & ACCEL WO W/P & SHOE,
UNLEAD & CALIPER W/P & SHOE, ABOVE FISH READY TO START WASHOVER IN
AM. SI & SDFN.
- 11-07-97 WELL DEAD START W/O @ 5278.65'. RECOVER METAL & SAND MILL TO
5288.15'. FISH FELL AWAY WENT TO 5321.12' SHOE DEPTH CIRC CLEAN
SET DOWN WT TOH W/S FISH HUNG IN WP BREAK OUT FISH L/D W/P TIH W
D/C'S 20 JTS AOH SI & SDFN.

ATTACHMENT - FORM 3160-5
RATHERFORD UNIT - WELL #01-34
14-20-603-246A
NAVAJO TRIBAL
SAN JUAN, UTAH
PAGE 3

11-08-97 WELL DEAD FINISH TIH W/AOH TOH LLD LOAD ALL RENTAL EQUIP. RETURN TO WEATHERFORD MOVE BIG A RACKS SPOT FLOAT W/PROD STRING, TIH W/BP, PS, SN, & 2 7/8" IPC, 5.5" TAC, SI & SDFN.

11-10-97 17 HR SITP = 420 OPEN WELL @ 0500, BLEED OFF PRIOR TO CREW ARRIVAL, KILL WELL, TIH W/TBG TAG @ 5323.78'. NDBOP-NUWH TIH W/2.5" X 2" X16 PUMP & 60-.75" RODS, SI & SDFN.

11-11-97 WELL HAD 250 PSI, CSG & TBG OPENED & BLED DOWN PUMP 15 BBLs 10# DOWN TBG FIN. TIH W/PUMP & RODS HANG WELL ON W/H LOAD & PRESSURE TO 500# GOOD. USE UNIT TO PUMP UP TO 500# GOOD PUMP ACTION. WELL TURNED TO PRODUCTION.-

sperry-sun
DRILLING SERVICES

A DRESSER INDUSTRIES, INC. COMPANY

Mobil
San Juan County
Utah
Ratherford Unit
RU 1-34 - MWD Surveys

SURVEY REPORT

12 November, 1997

Survey Ref: svy2057

Sperry-Sun Drilling Services

Survey Report for RU 1-34



Mobil
San Juan County

Utah
Ratherford Unit

Measured Depth (ft)	Incl.	Azim.	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
Gyro							
0.00	0.000	0.000	0.00	0.00 N	0.00 E	0.00	
200.00	0.200	63.050	200.00	0.16 N	0.31 E	0.14	0.100
400.00	0.240	62.430	400.00	0.51 N	0.99 E	0.45	0.020
600.00	0.330	46.290	600.00	1.10 N	1.78 E	0.69	0.060
800.00	0.420	25.860	799.99	2.16 N	2.52 E	0.60	0.080
1000.00	0.500	3.580	999.99	3.69 N	2.89 E	-0.08	0.097
1200.00	0.700	334.090	1199.97	5.66 N	2.41 E	-1.69	0.181
1400.00	0.800	333.660	1399.96	8.01 N	1.26 E	-4.06	0.050
1600.00	0.850	325.990	1599.94	10.49 N	0.19 W	-6.75	0.061
1800.00	0.840	330.800	1799.91	13.00 N	1.74 W	-9.53	0.036
2000.00	0.540	335.740	1999.90	15.14 N	2.84 W	-11.73	0.153
2200.00	0.220	315.550	2199.90	16.27 N	3.49 W	-12.96	0.171
2400.00	0.390	299.950	2399.89	16.89 N	4.35 W	-14.01	0.094
2600.00	0.950	321.380	2599.88	18.52 N	5.98 W	-16.30	0.302
2800.00	1.110	318.940	2799.85	21.28 N	8.28 W	-19.83	0.083
3000.00	0.680	306.520	2999.82	23.45 N	10.51 W	-22.92	0.235
3200.00	0.600	308.990	3199.81	24.81 N	12.28 W	-25.16	0.042
3400.00	0.340	317.660	3399.80	25.91 N	13.49 W	-26.79	0.134
3600.00	0.180	310.810	3599.80	26.55 N	14.13 W	-27.69	0.081
3800.00	0.280	231.880	3799.80	26.46 N	14.75 W	-28.11	0.151
4000.00	0.410	220.340	3999.80	25.61 N	15.60 W	-28.24	0.073
4200.00	0.610	211.520	4199.79	24.16 N	16.62 W	-28.12	0.107
4400.00	0.700	205.050	4399.77	22.14 N	17.69 W	-27.68	0.058
4600.00	0.760	195.620	4599.76	19.76 N	18.57 W	-26.86	0.067
4800.00	0.980	183.650	4799.73	16.77 N	19.03 W	-25.35	0.142
5000.00	1.130	182.510	4999.70	13.10 N	19.23 W	-23.18	0.076
5200.00	1.060	182.560	5199.66	9.28 N	19.40 W	-20.91	0.035
MWD Surveys							
5308.00	1.060	182.560	5307.65	7.28 N	19.49 W	-19.73	0.000
5315.00	4.800	147.600	5314.64	6.97 N	19.33 W	-19.41	56.826
5325.00	8.800	139.860	5324.56	6.03 N	18.62 W	-18.26	40.947
5335.00	12.500	137.370	5334.39	4.65 N	17.39 W	-16.44	37.277
5345.00	16.200	136.150	5344.08	2.85 N	15.69 W	-13.98	37.121
5355.00	19.500	135.410	5353.59	0.65 N	13.55 W	-10.94	33.077
5365.00	22.200	134.920	5362.94	1.87 S	11.04 W	-7.40	27.056
5375.00	24.200	134.560	5372.13	4.64 S	8.24 W	-3.48	20.050
5385.00	26.600	134.300	5381.16	7.65 S	5.18 W	0.79	24.026
5395.00	29.600	130.800	5389.98	10.82 S	1.71 W	5.49	34.220

Continued...

Sperry-Sun Drilling Services

Survey Report for RU 1-34



Mobil
San Juan County

Utah
Ratherford Unit

Measured Depth (ft)	Incl.	Azim.	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
5405.00	32.700	132.100	5398.54	14.25 S	2.17 E	10.65	31.719
5415.00	34.600	137.500	5406.87	18.16 S	6.09 E	16.16	35.430
5425.00	36.200	142.500	5415.02	22.59 S	9.81 E	21.84	33.078
5435.00	39.100	139.800	5422.94	27.35 S	13.64 E	27.81	33.356
5445.00	42.700	136.200	5430.49	32.20 S	18.03 E	34.28	43.018
5455.00	46.700	135.300	5437.60	37.24 S	22.94 E	41.26	40.497
5465.00	49.800	138.300	5444.26	42.68 S	28.04 E	48.65	38.229
5475.00	52.000	141.600	5450.57	48.62 S	33.03 E	56.27	33.757
5485.00	53.100	142.800	5456.65	54.89 S	37.89 E	63.99	14.552
5495.00	53.500	139.800	5462.62	61.15 S	42.91 E	71.83	24.382
5505.00	55.400	139.000	5468.44	67.33 S	48.20 E	79.83	20.084
5515.00	58.400	136.800	5473.90	73.54 S	53.82 E	88.10	35.206
5525.00	63.100	134.900	5478.78	79.79 S	59.89 E	96.76	49.835
5535.00	67.400	134.200	5482.97	86.16 S	66.37 E	105.80	43.467
5545.00	71.400	133.500	5486.49	92.65 S	73.12 E	115.13	40.533
5555.00	72.800	135.700	5489.56	99.33 S	79.89 E	124.59	25.184
5565.00	72.700	133.600	5492.53	106.04 S	86.68 E	134.10	20.080
5575.00	73.900	134.300	5495.40	112.69 S	93.58 E	143.64	13.746
5585.00	77.000	135.400	5497.91	119.51 S	100.44 E	153.27	32.777
5595.00	81.200	135.700	5499.80	126.52 S	107.31 E	163.02	42.103
5620.00	90.500	132.600	5501.61	143.86 S	125.19 E	187.82	39.198
5660.98	90.300	131.400	5501.33	171.28 S	155.64 E	228.75	2.969
5692.73	89.800	129.400	5501.30	191.86 S	179.82 E	260.49	6.493
5724.52	92.400	128.200	5500.69	211.77 S	204.58 E	292.27	9.007
5756.22	94.000	129.500	5498.92	231.63 S	229.23 E	323.92	6.499
5787.89	93.400	129.100	5496.87	251.64 S	253.69 E	355.52	2.275
5818.99	91.800	130.200	5495.46	271.47 S	277.61 E	386.58	6.241
5849.97	92.600	129.600	5494.27	291.33 S	301.36 E	417.54	3.227
5881.88	93.100	130.200	5492.69	311.77 S	325.81 E	449.40	2.446
5913.65	92.100	130.200	5491.25	332.25 S	350.05 E	481.13	3.148
5945.40	91.000	129.800	5490.39	352.65 S	374.36 E	512.87	3.686
5977.16	92.100	129.100	5489.53	372.83 S	398.88 E	544.61	4.105
6008.97	91.800	128.600	5488.45	392.77 S	423.63 E	576.40	1.832
6040.65	91.200	127.700	5487.62	412.33 S	448.54 E	608.07	3.414
6072.45	91.700	127.200	5486.81	431.66 S	473.78 E	639.85	2.223
6104.26	91.800	126.100	5485.84	450.64 S	499.28 E	671.61	3.471
6136.07	91.900	126.800	5484.81	469.53 S	524.86 E	703.38	2.222
6167.70	92.000	127.400	5483.74	488.60 S	550.07 E	734.97	1.922
6199.44	89.900	127.400	5483.21	507.87 S	575.28 E	766.69	6.616
6231.23	86.700	126.500	5484.15	526.97 S	600.67 E	798.44	10.456
6262.94	87.300	125.800	5485.81	545.65 S	626.24 E	830.07	2.905
6294.75	88.400	124.900	5487.01	564.04 S	652.17 E	861.79	4.467
6326.59	88.900	124.000	5487.76	582.05 S	678.42 E	893.52	3.233
6358.41	89.400	123.100	5488.23	599.63 S	704.93 E	925.20	3.235
6390.27	88.900	122.800	5488.70	616.96 S	731.66 E	956.87	1.830

Continued...

Sperry-Sun Drilling Services

Survey Report for RU 1-34



Mobil
San Juan County

Utah
Rutherford Unit

Measured Depth (ft)	Incl.	Azim.	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
6422.06	90.400	123.300	5488.90	634.30 S	758.31 E	988.49	4.974
6453.89	91.100	124.500	5488.48	652.05 S	784.72 E	1020.19	4.364
6485.63	91.500	125.400	5487.76	670.22 S	810.73 E	1051.84	3.102
6516.69	91.200	126.500	5487.03	688.45 S	835.87 E	1082.85	3.670
6548.45	91.200	127.200	5486.36	707.50 S	861.28 E	1114.58	2.204
6580.32	91.800	129.500	5485.53	727.26 S	886.26 E	1146.44	7.456
6611.32	92.100	131.000	5484.47	747.28 S	909.91 E	1177.41	4.932
6642.24	91.500	132.500	5483.50	767.86 S	932.96 E	1208.28	5.223
6673.25	90.800	133.000	5482.88	788.90 S	955.73 E	1239.21	2.774
6705.05	90.200	133.700	5482.60	810.73 S	978.85 E	1270.92	2.899
6736.79	89.800	133.900	5482.60	832.70 S	1001.76 E	1302.55	1.409
6768.54	92.300	134.400	5482.02	854.81 S	1024.54 E	1334.16	8.030
6800.28	91.500	134.400	5480.97	877.00 S	1047.20 E	1365.75	2.520
6832.03	91.400	133.900	5480.16	899.11 S	1069.98 E	1397.36	1.605
6863.92	92.300	134.600	5479.13	921.35 S	1092.81 E	1429.10	3.575
6902.00	91.200	133.900	5477.97	947.91 S	1120.07 E	1467.00	3.423
6936.00	91.200	133.900	5477.26	971.48 S	1144.56 E	1500.87	0.000

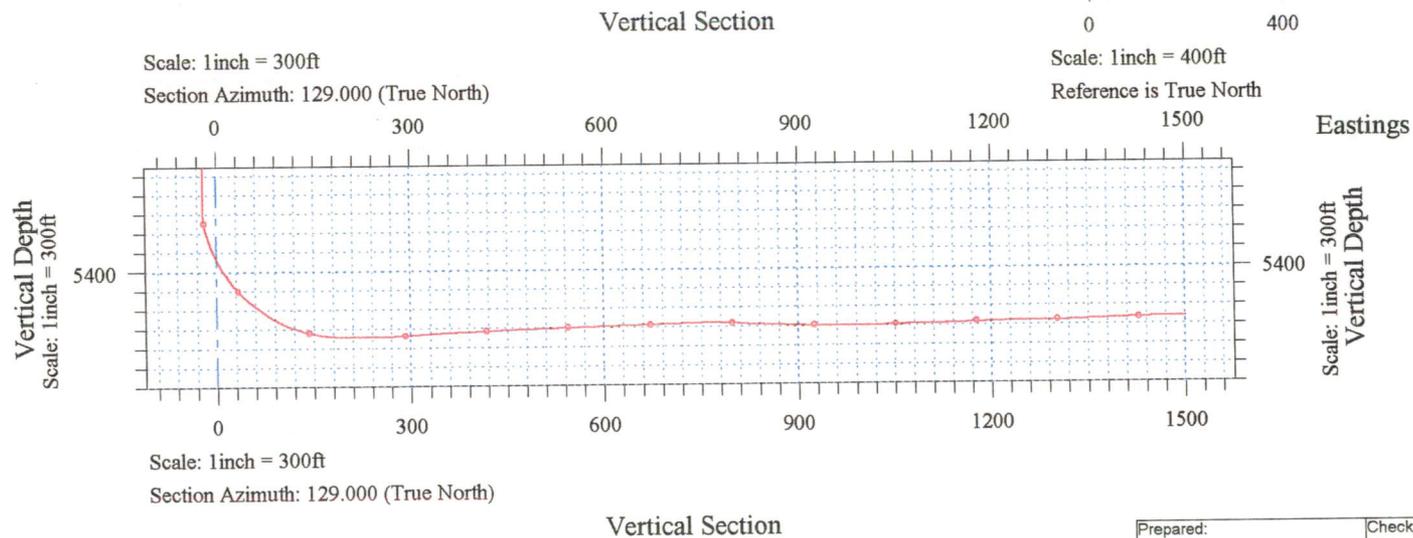
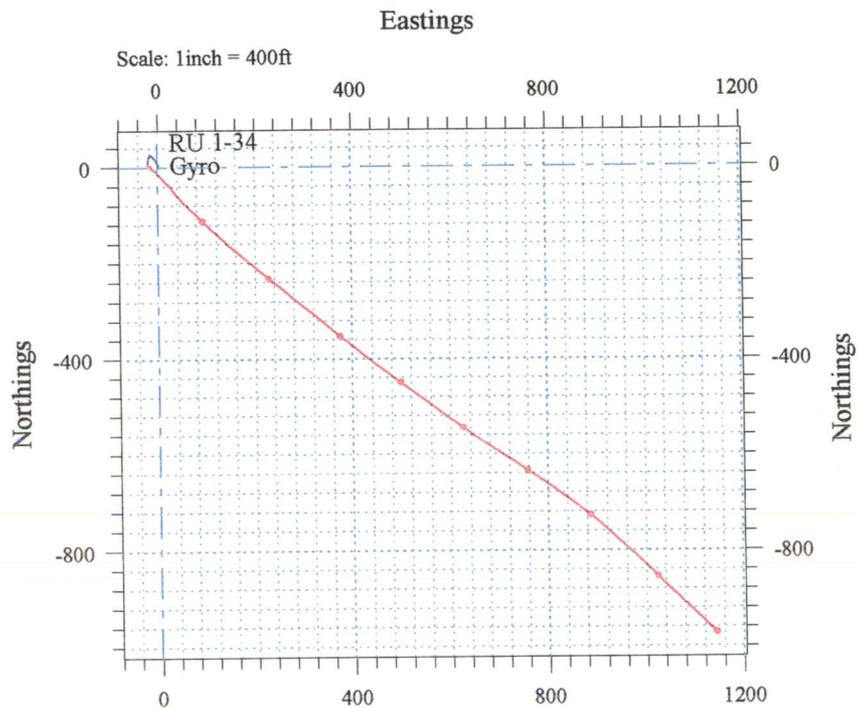
All data is in feet unless otherwise stated. Directions and coordinates are relative to True North. Vertical depths are relative to Well. Northings and Eastings are relative to Well.

The Dogleg Severity is in Degrees per 100ft.
Vertical Section is from Well and calculated along an Azimuth of 129.000° (True).

Based upon Minimum Curvature type calculations, at a Measured Depth of 6936.00ft.,
The Bottom Hole Displacement is 1501.27ft., in the Direction of 130.324° (True).

Customer: Mobil
 Folder: Mobil
 Field: San Juan County
 Project: Utah
 Structure: Ratherford Unit
 Well: RU 1-34

Leg #1



Prepared: _____ Checked: _____ Approved: _____

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

SUBMIT IN DUPLICATE

(See other instructions on reverse side)

FORM APPROVED
OMB NO. 1004-0137
Expires: February 28, 1995

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL GAS WELL DRY Other _____

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

2. NAME OF OPERATOR **MOBIL PRODUCING TX & NM INC.***
***MOBIL EXPLORATION & PRODUCING US INC. AS AGENT FOR MPTM**

3. ADDRESS AND TELEPHONE NO.
P.O. Box 633, Midland TX 79702 (915) 688-2585

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface
SW/SE 1133' FSL, 1980' FEL
At top prod. interval reported below
* #37
At total depth
* #37

14. PERMIT NO. _____ DATE ISSUED _____

5. LEASE DESIGNATION AND SERIAL NO.
14-20-603-246A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
NAVAJO TRIBAL

7. UNIT AGREEMENT NAME
RATHERFORD UNIT

8. FARM OR LEASE NAME, WELL NO.
RATHERFORD 1-34

9. API WELL NO.
43-037-16385

10. FIELD AND POOL, OR WILDCAT
GREATER ANETH

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
SEC. 1, T41S, R23E

12. COUNTY OR PARISH
SAN JUAN

13. STATE
UT

15. DATE SPUDDED **07-07-97** 16. DATE T.D. REACHED **10-13-97** 17. DATE COMPL. (Ready to prod.) **11-11-97** 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* **4624' RKB** 19. ELEV. CASINGHEAD _____

20. TOTAL DEPTH, MD & TVD ****#37** 21. PLUG, BACK T.D., MD & TVD ****#37** 22. IF MULTIPLE COMPL., HOW MANY* _____ 23. INTERVALS DRILLED BY _____ ROTARY TOOLS **X** CABLE TOOLS _____

24. PRODUCING INTERVAL(S), OF THIS COMPLETION - TOP, BOTTOM, NAME (MD AND TVD)*
LATERAL #1 (5500-5477'TVD)(5595-6936'TMD) - IS-DC

25. WAS DIRECTIONAL SURVEY MADE
YES

26. TYPE ELECTRIC AND OTHER LOGS RUN
NO 27. WAS WELL CORED
NO

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

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
13 3/8" / H40	48#	100'		SURFACE	
8 5/8" / H40	28#	1463'			
5 1/2" / K55	14# & 15.5#	5471'			
ORIGINAL	CASING	UNDISTURBED			

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 7/8"	5318' SN	5125' TAC

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 7/8"	5318' SN	5125' TAC

31. PERFORATION RECORD (Interval, size and number)
LAT #1 (5500-5477'TVD)(5595-6936'TMD)

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5571-6936'	LATERAL #1 ACIDIZE W/24612 GALS 15% HCL ACID

33.* PRODUCTION

DATE FIRST PRODUCTION **11-15-97** PRODUCTION METHOD (Flowing, gas lift, pumping - size and type of pump) **PUMPING / 2.5"X2"X16" PUMP** WELL STATUS (Producing or shut-in) **PRODUCING**

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL - BBL.	GAS - MCF.	WATER - BBL.	GAS - OIL RATIO
11-16-97	24			376	220	624	

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

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

35. LIST OF ATTACHMENTS _____

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

SIGNED Shirley Houchins for TITLE **SHIRLEY HOUCHINS/ENV & REG TECH** DATE **12-23-97**

*(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):

38. GEOLOGIC MARKERS

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
*#4 TOTAL DEPTH			BHL: LATERAL #1 971' FSL & 1145' FEL F/SURF SPOT.			
) **#20 & 21			LAT. #1 (5500-5477'TVD)(5595-6936'TMD)			

OPERATOR MOBIL PRODUCING TX & NM, INC.
 ADDRESS P. O. BOX 633, MIDLAND, TX 79702

OPERATOR ACCT. NO. H 7370

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	APT NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
B	99999	06280	43-037-16385	RATHERFORD 1-34	SW/SE	1	41S	23E	SAN JUAN	07-07-97	11-11-97
WELL 1 COMMENTS: Entity added 12-30-97. <i>Jec</i> (Ratherford Unit)											
WELL 2 COMMENTS:											
WELL 3 COMMENTS: NOV 30 1997											
WELL 4 COMMENTS:											
WELL 5 COMMENTS:											

- ACTION CODES** (See instructions on back of form)
- A - Establish new entity for new well (single well only)
 - B - Add new well to existing entity (group or unit well)
 - C - Re-assign well from one existing entity to another existing entity
 - D - Re-assign well from one existing entity to a new entity
 - E - Other (explain in comments section)

NOTE: Use COMMENT section to explain why each Action Code was selected.

Shirley Houchins
 Signature SHIRLEY HOUCHINS

ENV & REG TECHNICIAN 12-22-97
 Title Date

Phone No. (915) 688-2585

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.
14-20-603-246A

6. If Indian, Allottee or Tribe Name
NAVAJO TRIBAL

7. If Unit or CA/Agreement, Name and/or No.
RATHERFORD UNIT

8. Well Name and No.
RATHERFORD 1-34

9. API Well No.
43-037-16385

10. Field and Pool, or Exploratory Area
GREATER ANETH

11. County or Parish, State
SAN JUAN UT

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator
MOBIL PRODUCING TX & NM INC.*
***MOBIL EXPLORATION & PRODUCING US INC. AS AGENT FOR MPTM**

3a. Address
P.O. Box 633, Midland TX 79702

3b. Phone No. (include area code)
(915) 688-2585

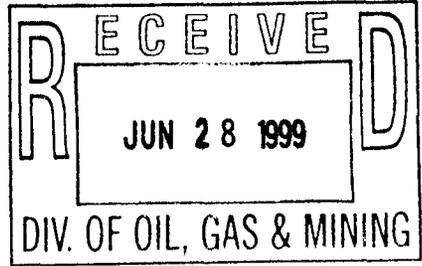
4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
SEC. 1, T41S, R24E
(SW/SE) 1133' FSL & 1980' FEL
LAT #1 BHL 971' FSL & 1145' FEL/SURF SPOT

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input checked="" type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Coompleted Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

SEE ATTACHED PROCEDURE.



14. I hereby certify that the foregoing is true and correct
 Name (Printed/Typed) **SHIRLEY HOUCHINS** Title **ENVIRONMENTAL & REGULATORY TECHNICIAN**

See Noseley for Date **6-24-99**

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by _____ Title _____ Date _____
 Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. Office _____

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.

(Instructions on reverse)

Rutherford Unit #1-34
Repair Casing Leak

Workover Procedure

1. **MIRU DDPU. POH w/rods and pump as follows:**
 - ⇒ 1.5" x 26' PR
 - ⇒ 8' – 6' – 4' 1" pony rods
 - ⇒ 73 – 1" rods
 - ⇒ 76 – 7/8" rods
 - ⇒ 60 – 3/4" rods
 - ⇒ 4' stabilizer bar
 - ⇒ 2.5" x 2" x 24' insert pump

2. **Evaluate rod condition for replacement. ND wellhead/NU BOP's and test using chart. Kill well as necessary. Release TAC and POH w/production string as follows:**
 - ⇒ 165 jt - 2-7/8" tubing
 - ⇒ 5-1/2" x 2-7/8" TAC @ 5125'
 - ⇒ 3 jts – 2-7/8" tubing
 - ⇒ 3 jts – 2-7/8" IPC tubing
 - ⇒ 2-7/8" seating nipple @ 5318'
 - ⇒ 2-7/8" x 4' perfed sub
 - ⇒ 2-7/8" bull plug

3. **LD and inspect top, middle and bottom joints. Redress/Replace TAC. MI and rack 2-7/8" WS.**

4. **RIH w/5-1/2" packer and RBP on 2-7/8" WS. Set RBP @ +/-5250'. Test RBP and annulus to 500 psi. Test casing, isolate casing leak(s).**

5. **If casing leak is found, establish pump-in rate and pressure. Consult w/engineer for slurry type and application method.**

Casing Leak Repair

6. If casing leaks, consider running inspection log if injection rate is below ¼ bpm. See step 20 to TA well. POH w/packer and dump bail 20 ft of sand on top of RBP. RIH w/bit and set 50 ft above leak. Use slurry below for squeeze job, however, if the injection rate is below ¼ bpm, a micro-cement slurry should be used instead. (This can be done with a retainer in lieu of a packer).

Confer with engineer on volumes before job.

Cement Slurry: 25 sx Class 'B' + 0.1% D65 (dispersant)

Density: 15.6 ppg

Yield: 1.19 ft³/sk

- ⇒ Begin pumping 5 bbl fresh water ahead of cement slurry.
 - ⇒ Pump 25 sx (1 bbl for inside of casing and 3 bbl for behind pipe) while maintaining 500 psi on backside during job.
 - ⇒ Begin pumping fresh water displacement down to top of bit, 0.00579 bbl/ft.
7. RIH w/4-3/4" bit on 2-7/8" WS to drill out squeeze. Circulate hole clean. Test squeeze to 500 psi. Circulate sand off RBP. POH w/bit. Resqueeze if necessary.
8. RIH w/RBP retrieving tool on 2-7/8" WS. Retrieve RBP. RIH w/4-3/4" bit to top of window – 5307'. Circulate hole clean. POH, LD 2-7/8" WS.
9. RIH, testing production tubing as follows:
- ⇒ 2-7/8" bull plug
 - ⇒ 2-7/8" x 4' perfed sub
 - ⇒ 2-7/8" seating nipple @ +/-5318'
 - ⇒ 3 jts – 2-7/8" IPC tubing
 - ⇒ 3 jts – 2-7/8" tubing
 - ⇒ 5-1/2" x 2-7/8" TAC @ +/-5125', 25K tension
 - ⇒ 165 jt - 2-7/8" tubing

10. ND BOP's. NU wellhead. RIH w/rods and pump as follows:

⇒ **2.5" x 2" x 24' insert pump**

⇒ **4' stabilizer bar**

⇒ **60 – ¾" rods**

⇒ **76 – 7/8" rods**

⇒ **73 – 1" rods**

⇒ **1" pony rods as needed**

⇒ **1.5" x 26' PR**

11. Space out w/pump +/-14" off bottom.

12. Hang well on. Pressure tubing w/unit.

13. Clean location. RDMO DDP. Turn well over to production.

GENERAL AREA REQUIREMENTS

1. ALL SAFETY GUIDELINES WILL BE FOLLOWED. INCLUDING PERSONAL PROTECTIVE EQUIPMENT; HARD HATS, ANSI BOOTS, AND SAFETY GLASSES WITH SIDE SHIELDS ARE REQUIRED. OTHER COMMON MISTAKES ARE RIG HANDRAILS NEED TO BE UP, LOCATIONS NEED TO BE NEAT AND ORDERLY, AND ALL VENDORS MUST HAVE ALL SAFETY TRAINING UP TO DATE INCLUDING DOCUMENTATION ON LOCATION. HYDRIL BOPS WILL BE USED ANY TIME SOMETHING IS IN THE WELL THAT THE BOP CANNOT CLOSE AROUND INCLUDING DRILL COLLARS AND SUB PUMPS.
2. NOTIFICATIONS - MUST BE NOTIFIED FOR LARGE SPILLS, WATER OR OIL > 10 BBLs

Note: All Mobil Drilling Supervisors

If spill occurs, take various pictures of spill before and after clean-up. Make sure all angles of spill are photographed.

Supervisors are to notify Jerry Orndorff and Mobil EHS Tech ONLY --- Allow tech to notify appropriate agencies.

MOBIL DRILLING SUPT – JERRY ORNDORFF - 915/688-1648
MOBIL WCT ENGINEER – RICK ADAMS - 915-688-1782

MUST BE NOTIFIED FOR ANY ACCIDENTS UP TO AND INCLUDING LOST TIME;

MOBIL DRILLING SUPT – JERRY ORNDORFF - 915/688-1648
EHS ADVISOR- SCOTT McLaurin - 915/688-2213

CASING LEAK RIG-UPS, SQUEEZE NOTIFICATIONS, AND QUESTIONS ABOUT PRESSURE TEST REQUIREMENTS;

BLM – 505/599-8907, NOTIFY BEFORE SQUEEZE SO THEY CAN WITNESS IF THEY WANT

IF CASING LEAK IS A SUPRISE (WASN'T EXPECTED), DISCUSS PLAN WITH THE ENGINEER. THEN CALL WAYNE TOWNSEND 505/599-6359 AND DISCUSS THE PROBLEM AND PLAN. ENGINEER WILL PREPARE A DOCUMENTATION PROCEDURE TO SEND TO SHIRLEY HOUCHINS

3. WELL CONTROL. WELL SUBSEQUENTLY CONTROLLED WITH FRESH WATER, CLEAN 10# BRINE, HEAVY SALT MUD CaCl₂ UP TO 11.6# w/0.1% Safebreak CBF, PARTICULATE CaCO₃, MUD UP TO 12.6, AND BARITE MUD ABOVE 12.6#. FOR THE TIME BEING, WE ARE AVOIDING SNUBBING UNITS.
4. RIG SUPERVISORS WILL MAKE EVERY ATTEMPT TO ENHANCE RELATIONSHIPS WITH LOCALS AND VENDORS, WITHOUT SIGNIFICANTLY IMPACTING COSTS. OBEY AND ENCOURAGE ALL YOU WORK WITH TO BE COURTEOUS AND STRICTLY OBEY SPEED LIMITS ON LEASE ROADS.

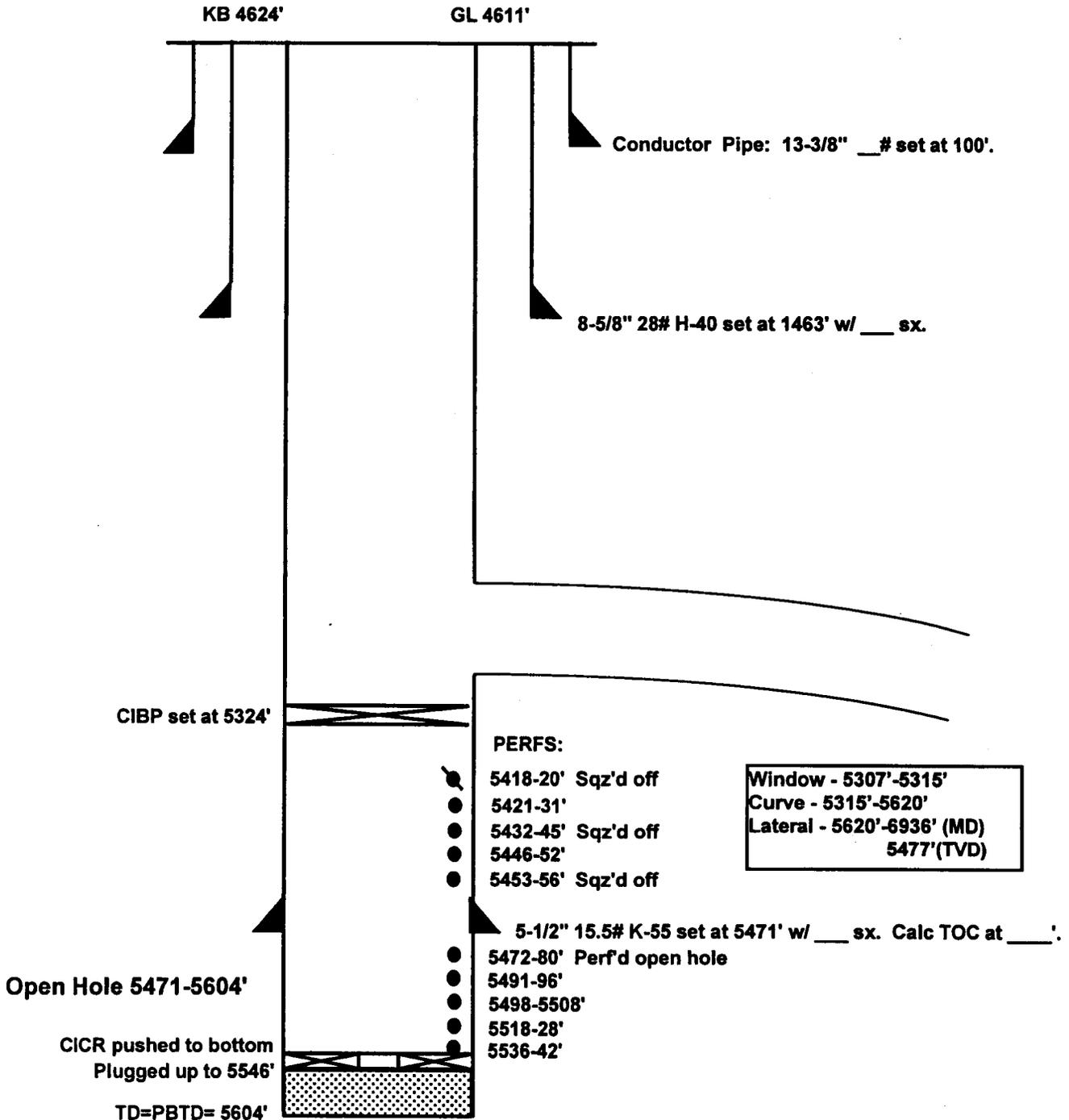
5. CASING LEAK SQUEEZES WILL BE DONE WITH CLASS G NEAT. SUCCESS RATE WITH THIS CEMENT FROM HALLIBURTON IS 80%. OTHER TECHNIQUES AND COMPANIES WILL NOT BE USED AS LONG AS SUCCESS RATE CONTINUES. INJECTORS HAVE TO PASS 1000#/30 MINS, PRODUCERS 500#/30 MINS. DO NOT TEST UNLESS YOU SUSPECT LEAK.
 - A. FOR SHALLOW LEAKS WITH NO CEMENT ON CASING ANNULUS, CONSIDER CUTTING OUT THE BAD SECTION OF PIPE, POH, AND TIE BACK AND CEMENT A NEW SECTION OF CASING.
 - B. FOR BLEED OFF LEAKS, SPOT CEMENT ACROSS AND ABOVE LEAK, PRESSURE UP TO 1500# UNTIL SQUEEZES. POH, SI BLINDS AND RE-PRESSURE UP TO 1500# SION W/PRESSURE ON SQUEEZE.
 - C. FOR EIR > 0.5 BPM AND LEAKS DEEPER THAN 1000' USE CMT RETAINER, SAME CEMENT. DO NOT DO NOT FAIL TO CALL OUT ENOUGH CEMENT TO SQUEEZE THE LEAK. THE EXTRA COST OF THE BULK CEMENT IS EASILY JUSTIFIED VS. THE COST OF A FAILED SQUEEZE DUE TO NOT ENOUGH CEMENT.

6. NOTIFY OPERATIONS PERSONNEL OF ANY WORK IMPACTING THEM. THIS INCLUDES ANY EMERGENCY INJECTOR SHUT-INS. DO NOT TURN PRODUCTION WELLS BACK ON, LEAVE THIS TO THE OPERATIONS PEOPLE SO THEY CAN BE SURE ALL SAFETY SHUT-DOWNS ARE ACTIVE, AND THAT SURFACE FACILITIES ARE READY FOR THE PRODUCTION. KEEP TRACK OF YOUR OWN TUBING AND OTHER MATERIALS YOU WILL NEED TO DO THE WORK.

RATHERFORD UNIT # 01-34
GREATER ANETH FIELD
1133' FSL & 1980' FEL
SEC 1-T41S-R23E
SAN JUAN COUNTY, UTAH
API 43-037-16385
PRISM 0042920

PRODUCER

Capacities:			
	bbl/ft	gal/ft	cuf/ft
2-7/8" 6.5#	.00579	.2431	.0325
5-1/2" 14#	.0244	1.0249	.1370
5-1/2" 15.5#	.0238	.9997	.1336
2-7/8x5.5 14#	.0164	.6877	.0919
2-7/8x5.5 15.5#	.0158	.6625	.0886



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.

14-20-603-246A

6. If Indian, Allottee or Tribe Name

NAVAJO TRIBAL

7. If Unit or CA/Agreement, Name and/or No.

RATHERFORD UNIT

8. Well Name and No.

RATHERFORD 1-34

9. API Well No.

43-037-16385

10. Field and Pool, or Exploratory Area

GREATER ANETH

11. County or Parish, State

SAN JUAN UT

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well

Oil Well Gas Well Other

2. Name of Operator

**MOBIL PRODUCING TX & NM INC.*
*MOBIL EXPLORATION & PRODUCING US INC. AS AGENT FOR MPTM**

3a. Address

P.O. Box 633, Midland TX 79702

3b. Phone No. (include area code)

(915) 688-2585

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

**SEC. 1, T41S, R24E R23E
(SW/SE) 1133' FSL & 1980' FEL
LAT #1 BHL 971' FSL & 1145' FEL/SURF SPOT**

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation
<input type="checkbox"/> Final Abandonment Notice	<input checked="" type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal
			<input type="checkbox"/> Water Shut-Off
			<input type="checkbox"/> Well Integrity
			<input type="checkbox"/> Other _____

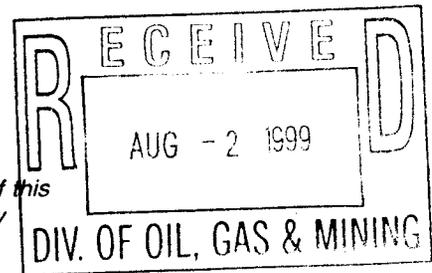
13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

07-09-99 / 07-23-99 CASING REPAIR SEE ATTACHED.

COPY SENT TO OPERATOR
Date: 8-24-99
Initials: CHP

**Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY**

*Federal Approval of this
Action is Necessary*



14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

SHIRLEY HOUCHINS

Title

ENVIRONMENTAL & REGULATORY TECHNICIAN

Date **7-28-99**

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

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.

(Instructions on reverse)

**ATTACHMENT – FORM 3160-5
RATHERFORD UNIT – WELL #1-34
14-20-603-246A
API # 43-037-16385
NAVAJO TRIBAL
SAN JUAN, UTAH**

- 07-09-99 JULY 8, 1999, CALL TO CHARMAINE HESTEEN @ NAVAJO EPA, INFORMED OF INTENT TO DIG & LINE GROUND PIT. MIRU MONTEZUMA #15. RD PRODUCTION WELLHEAD, RELEASE F/ON/OFF TOOL. POOH W/RODS. LD ON/OFF TOOLS INSPECT RODS. OK. RIG UP PUMP, PIT & FLOW LINES. PRESSURE TBG TO 2500 PSI. PRESSURE UP TBG TO 2800 PSI. COULD NOT PUMP OUT TBG. SIFN.
- 07-10-99 SI TBG AND CSG. PRESSURE AT 07:30 WAS 0 PSI. NDPWH. NU BOPE. RU WIRELINE RIH AND PERF 2.875" TBG AT 4955'. POH WITH PRODUCTION TBG. RIH WITH 5.5" PACKER AND BRIDGE PLUG TO 5172'. SET PLUG. SIFN.
- 07-11-99 WELL SI ON SUNDAY, JULY 11. WILL RESUME OPERATIONS ON MONDAY, JULY 12, 1999.
- 07-12-99 SI PRESSURE AT 07:30 WAS 0 PSI. SET PACKER AT 2751' TEST TBG, TEST CSG. LEAKED, LOCATE CSG. LEAK FROM 2411' TO 2427'. ESTABLISH INJECTION RATE AT 850 PSI. SLIGHT BLOW ON CSG. ANN. RELEASE PACKER. SIFN.
- 07-13-99 SI PRESSURE AT 07:30 WAS 0 PSI. LD PACKER. LOAD CSG TO SURFACE WITH WATER; DROP SAND DOWN CSG. TO BRIDGE PLUG AT 5172'. MAKE-UP AND RIH W/CMT RETAINER ON 2.875" TBG TO 2339'. SET CMT RETAINER. ESTABLISH INJECTION RATE AT 850 PSI TO 1400 PSI. NO CIRC. AROUND CSG. ANN. SIFN.
- 07-14-99 CALLED BLM AT 05:00 ON JULY 14, 1999. INFORMED OF INTENT TO SQUEEZE CSG LEAK ON RATHERFORD UNIT 1-34. TALKED TO ANSWERING MACHINE. MIRU DOWELL CMT UNIT. DOWELL ESTABLISH INJECTION RATE OF .75 BBL PER/MIN AT 1100 PSI, SQUEEZE CSG LEAK DOWN 2.875" TBG UNDER RETAINER SET AT 2339' W/ 54 SACKS OF CLASS 'B' CMT + .25% FLUID LOSS + .25% TIC DISPERSANT. TBG PRESSURE OF 1300 PSI. CSG PESSURE 500 PSI. REVERSE OUT 5 SXS OF CMT TO PIT. 39 SXS CMT IN FORMATION. POH W/ SETTING TOOL FOR RETAINER. SIFN.
- 07-15-99 WELL SI. WAIT ON CMT. WILL RESUME OPERATIONS ON FRIDAY 07-16-99.
- 07-16-99 SI PRESSURE AT 07:30 WAS 0 PSI. RIH W/ BIT ON 2.875" TBG. 2339'. TAG UP ON CMT RETAINER. RU AND TEST CSG TO 800 PSI. OK. DRLG OUT CMT. RETAINER FROM 2339' TO 2342'. RIH TO 2397' TAG UP ON CMT DRLG OUT FROM 2397' TO 2398'. PUMP PRESSURE TO 750 PSI. RD POWER SWIVEL. POH, INSPECT BIT. RU TO CSG AND TEST CSG TO 800 PSI. CLEAN BIT. RIH W/BIT ON 2.875" TBG TO 2243'. SIFN.
- 07-17-99 SI PRESSURE AT 07:30 WAS 0 PSI. RIH W/2.875" TBG FROM 2243' TO 2398'. TAG UP ON CMT. DRLG OUT CMT FROM 2398' TO 2427'. CIRC HOLE CLEAN. TEST CSG TO 700 PSI. LOST 100 PSI IN 30 MIN. RD POWER SWIVEL. POH. RIH W/2.875" BULL PLUG, 4' PERF SUB., AND 2.875" TBG TO 2803.22'. RU SWAB EQUIP FOR NEGATIVE CSG, SQUEEZE TEST. TAG FLUID LEVEL AT 250'. SWAB FLUID LEVEL DOWN TO 2500'. WELL SI.

07-18-99 WELL SI. ALLOW FLUID ENTRY INTO WELL BORE. TEST FOR NEGATIVE CSG. SQUEEZE TEST.

07-19-99 SI 36 HRS TBG/CSG VAC. RIH W/ SWAB FL @1900. LOAD AND TEST CSG TO 750# DN TO 450# IN 30 MIN. TEST TO 750# BLED DN TO 600# 30 MIN, TEST TO 750# BLED TO 600# 30 MIN. PSI TO 750# . BLED DN TO 550# IN 1 HR, HOLDING 550# LAST 30 MIN. POH W/ TBG LAY DN SEAT NIP. RIH W/ DC'S LAY DN SAME. RIH W/ 5.5" RET TOOL ON 2.875" TBG TO 5132. WASHED 40' SAND AND JUNK PIECES OF CMT RET. CIRC CLEAN. LATCHED ON REL. RBP WENT ON VAC. SWISDFN.

07-20-99 SI 13 HRS TBG/CSG 0#, POH W/ TBG & RBP. RIH W/BP 2.875"X4' PERF SUB. INSERT PUMP. TBG SUB. DRAIN SUB & 5.5" TAC, TBG, LANDED W/ 1-JT IPC. INSTALLED WELL HEAD. POH W/ RODS & ON/OFF TOOL FOUND MARKS ON BTM TOOL. SWISDFN.

07-21-99 SI 13 HRS, TBG/CSG 0# RIH W/ ROD ON/OFF TOOL 2-STABIZ. ATTEMP TO LATCH ON TO PUMP. NO SUCCESS. POH W/ RODS/TOOL, FOUND LITTLE CMT INSIDE TOOL. NIP DN WELL HEAD INSTALLED BOP/HYDRIL FUNCTION TEST STACK. PUMP OUT PLUG ON DRAIN PLUG @2000#, POH W/ TBG & PUMP LOAD OUT PUMP. DIDN'T SEE CMT PACKED AROUND PULL ROD ON PUMP. SWISDFN.

07-22-99 PU BP PERF SUB. TBG PUMP W/ HANDLING SUB 2.875" TEST PUMP 600# OK SI SD. POH W/PUMP, LAY DN & CHECK CLEAN OUT, RIH W/ 80-JTS OE TBG. WAIT ON FLOAT POH LAY DN TBG. INSTALLED WELL HEAD. SWISDFN.

07-23-99 RIH W/PUMP ON/OFF TOOL, 2-4'X1" STABIZ, 76-1" STEEL RODS, 132-.875", WAIT ON PUMP HAND, SPACE OUT, FORM TOP. PUMP W/1-4'X1" PONY SUB, LOAD W/ WTR & TESTED TO 400# OK GOOD PUMP ACTION. RDMO MONTEZUMA. FINAL REPORT. TURN TO PROD. LATERAL 1A1 FROM 5307' TO 6936'.

ExxonMobil Production Comp
U.S. West
P.O. Box 4358
Houston, Texas 77210-4358

June 27, 2001

ExxonMobil
Production

Mr. Jim Thompson
State of Utah, Division of Oil, Gas and Mining
1549 West North Temple
Suite 1210
Salt Lake City, UT 84114-5801

Change of Name – Mobil Oil Corporation to
ExxonMobil Oil Corporation

Dear Mr. Thompson

Effective June 1, 2001, Mobil Oil Corporation (MOC) changed its name to ExxonMobil Oil Corporation (EMOC). This was a name change only; EMOC is the same corporation as Mobil Oil Corporation, but with a new name. No facility or other asset was transferred from one corporation to another by virtue of the name change. Specifically, EMOC will remain the owner and operator of its existing exploration and production oil and gas properties and facilities, as well as relevant permits.

There is no change to the name of Exxon Mobil Corporation, the ultimate shareholder of EMOC.

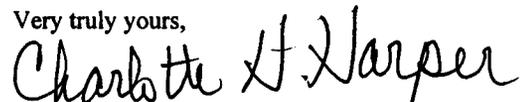
Please note the change of name of MOC to ExxonMobil Oil Corporation in your records pertaining to any MOC permits.

The Federal Identification Number for MOC (13-5401570) will remain the same for EMOC.

A copy of the Certification, Bond Rider and a list of wells are attached.

If you have any questions please feel free to call Joel Talavera at 713-431-1010

Very truly yours,



Charlotte H. Harper
Permitting Supervisor

ExxonMobil Production Company
a division of Exxon Mobil Corporation,
acting for ExxonMobil Oil Corporation

RECEIVED

JUN 27 2001

DIVISION OF
OIL, GAS AND MINING



United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
Navajo Area Office
NAVAJO REGION

P.O. Box 1060
Gallup, New Mexico 87305-1060

AUG 30 2001

IN REPLY REFER TO:

RRES/543

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Charlotte H. Harper, Permitting Supervisor
Exxon Mobil Production Company
U. S. West
P. O. Box 4358
Houston, TX 77210-4358

Dear Ms. Harper:

This is to acknowledge receipt of your company's name change from Mobil Oil Corporation to ExxonMobil Oil Corporation effective June 1, 2001. The receipt of documents includes the Name Change Certification, current listing of Officers and Directors, Listing of Leases, Financial Statement, filing fees of \$75.00 and a copy of the Rider for Bond Number 8027 31 97. There are no other changes.

Please note that we will provide copies of these documents to other concerned parties. If you need further assistance, you may contact Ms. Bertha Spencer, Realty Specialist, at (928) 871-5938.

Sincerely,

DEMMI DENETSONE

Regional Realty Officer

cc: BLM, Farmington Field Office w/enclosures ✓
Navajo Nation Minerals Office, Attn: Mr. Akhtar Zaman, Director/w enclosures

MINERAL RESOURCES	
ADM 1	<i>DB/MC</i>
NATV AM MIN COORD	_____
SOLID MIN TEAM	_____
PETRO MIN TEAM	<i>2</i>
O & G INSPECT TEAM	_____
ALL TEAM LEADERS	_____
LAND RESOURCES	_____
ENVIRONMENT	_____
FILES	_____

ExxonMobil Production Company
U.S. West
P.O. Box 4358
Houston, Texas 77210-4358

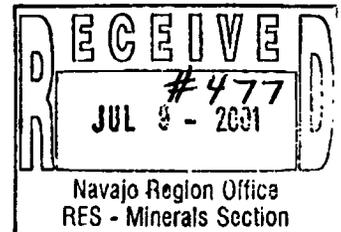
AS 7/12/2001
SH
543
File

June 27, 2001

ExxonMobil
Production

Certified Mail
Return Receipt Requested

Ms. Genni Denetsone
United States Department of the Interior
Bureau of Indian Affairs, Navajo Region
Real Estate Services
P. O. Box 1060
Gallup, New Mexico 87305-1060
Mail Code 543



Change of Name -
Mobil Oil Corporation to
ExxonMobil Oil Corporation

Dear Ms. Denetsone:

Effective June 1, 2001, Mobil Oil Corporation (MOC) changed its name to ExxonMobil Oil Corporation (EMOC). This was a name change only; EMOC is the same corporation as Mobil Oil Corporation, but with a new name. No facility or other asset was transferred from one corporation to another by virtue of the name change. Specifically, EMOC will remain the owner and operator of its existing exploration and production oil and gas properties and facilities, as well as relevant permits.

There is no change to the name of Exxon Mobil Corporation, the ultimate shareholder of EMOC.

Please note the change of name of MOC to ExxonMobil Oil Corporation in your records pertaining to any MOC permits.

The Federal Identification Number for MOC (13-5401570) will remain the same for EMOC.

Attached is the Name Change Certification, Current listing of Officers and Directors, Filing Fee of \$75/-, Listing of Leases, Financial Statement and a copy of the Rider for Bond number 8027 31 97. The original Bond Rider has been sent to Ms. Barbar Davis at your Washington Office.

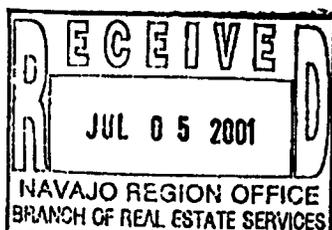
If you have any questions, please contact Alex Correa at (713) 431-1012.

Very truly yours,

Charlotte H. Harper

Charlotte H. Harper
Permitting Supervisor

Attachments



ExxonMobil Production Company
a division of Exxon Mobil Corporation,
acting for ExxonMobil Oil Corporation

NOTE: Check forwarded to Ella Jossie

Bureau of Indian Affairs
Navajo Region Office
Attn: RRES - Mineral and Mining Section
P.O. Box 1060
Gallup, New Mexico 87305-1060

Gentlemen:

The current listing of officers and director of ExxonMobil Oil Corporation (Name of Corporation), of New York (State) is as follows:

OFFICERS

President	<u>F.A. Risch</u>	Address <u>5959 Las Colinas Blvd. Irving, TX 75039</u>
Vice President	<u>K.T. Koonce</u>	Address <u>800 Bell Street Houston, TX 77002</u>
Secretary	<u>F.L. Reid</u>	Address <u>5959 Las Colinas Blvd. Irving, TX 75039</u>
Treasure	<u>B.A. Maher</u>	Address <u>5959 Las Colinas Blvd. Irving, TX 75039</u>

DIRECTORS

Name	<u>D.D. Humphreys</u>	Address <u>5959 Las Colinas Blvd. Irving, TX 75039</u>
Name	<u>P.A. Hanson</u>	Address <u>5959 Las Colinas Blvd. Irving, TX 75039</u>
Name	<u>T.P. Townsend</u>	Address <u>5959 Las Colinas Blvd. Irving, TX 75039</u>
Name	<u>B.A. Maher</u>	Address <u>5959 Las Colinas Blvd. Irving, TX 75039</u>
Name	<u>F.A. Risch</u>	Address <u>5959 Las Colinas Blvd. Irving, TX 75039</u>

Sincerely,

Alex Correa

This is to certify that the above information pertaining to ExxonMobil Oil Corporation (Corporation) is true and correct as evidenced by the records and accounts covering business for the State of Utah and in the custody of Corporation Service Company (Agent), Phone: 1 (800) 927-9800 whose business address is One Utah Center, 201 South Main Street, Salt Lake City, Utah 84111-2218



Signature

AGENT AND ATTORNEY IN FACT

Title

CERTIFICATION

I, the undersigned Assistant Secretary of ExxonMobil Oil Corporation. (formerly Mobil Oil Corporation), a corporation organized and existing under the laws of the State of New York, United States of America, DO HEREBY CERTIFY, That, the following is a true and exact copy of the resolutions adopted by the Board of Directors on May 22, 2001:

CHANGE OF COMPANY NAME

WHEREAS, the undersigned Directors of the Corporation deem it to be in the best interest of the Corporation to amend the Certificate of Incorporation of the Corporation to change the name and principal office of the Corporation:

NOW THEREFORE BE IT RESOLVED, That Article 1st relating to the corporate name is hereby amended to read as follows:

"1st The corporate name of said Company shall be,

ExxonMobil Oil Corporation",

FURTHER RESOLVED, That the amendment of the Corporation's Certificate of Incorporation referred to in the preceding resolutions be submitted to the sole shareholder of the Corporation entitled to vote thereon for its approval and, if such shareholder gives its written consent, pursuant to Section 803 of the Business Corporation Law of the State of New York, approving such amendment, the proper officers of the Corporation be, and they hereby are, authorized to execute in the name of the Corporation the Certificate of Amendment of Certificate of Incorporation, in the form attached hereto;

FURTHER RESOLVED, That the proper officers of the Corporation be and they hereby are authorized and directed to deliver, file and record in its behalf, the Certificate of Amendment of Certificate of Incorporation, and to take such action as may be deemed necessary or advisable to confirm and make effective in all respects the change of this Company's name to EXXONMOBIL OIL CORPORATION.

WITNESS, my hand and the seal of the Corporation at Irving, Texas, this 8th day of June, 2001.

D. A. Milligan
Assistant Secretary

COUNTY OF DALLAS)
STATE OF TEXAS)
UNITED STATES OF AMERICA)

Sworn to and subscribed before me at Irving, Texas, U. S. A. on this the 8th day of June, 2001.

Janice M. Phillips
Notary Public



LISTING OF LEASES OF MOBIL OIL CORPORATION

	Lease Number
1)	14-20-0603-6504
2)	14-20-0603-6505
3)	14-20-0603-6506
4)	14-20-0603-6508
5)	14-20-0603-6509
6)	14-20-0603-6510
7)	14-20-0603-7171
8)	14-20-0603-7172A
9)	14-20-600-3530
10)	14-20-603-359
11)	14-20-603-368
12)	14-20-603-370
13)	14-20-603-370A
14)	14-20-603-372
15)	14-20-603-372A
16)	14-20-603-4495
17)	14-20-603-5447
18)	14-20-603-5448
19)	14-20-603-5449
20)	14-20-603-5450
21)	14-20-603-5451

6/1/01

CHUBB GROUP OF INSURANCE COMPANIES

1000 West Loop South, Suite 1900, Houston, Texas 77027-3301
Telephone: (713) 297-4600 • Facsimile: (713) 297-4750

NA Bond

FEDERAL INSURANCE COMPANY RIDER
to be attached to and form a part of

BOND NO 8027 31 97

wherein

Mobil Oil Corporation and Mobil Exploration and Producing U.S., Inc. is named as Principal and

FEDERAL INSURANCE COMPANY AS SURETY,

**in favor of United States of America, Department of the Interior
Bureau of Indian Affairs**

**in the amount of \$150,000.00
bond date: 11/01/65**

**IT IS HEREBY UNDERSTOOD AND AGREED THAT effective June 1, 2001
the name of the Principal is changed**

FROM: Mobil Oil Corporation and Mobil Exploration and Producing U.S., Inc.

TO : ExxonMobil Oil Corporation

All other terms and conditions of this Bond are unchanged.

Signed, sealed and dated this 12th of June, 2001.

ExxonMobil Oil Corporation

By:



FEDERAL INSURANCE COMPANY

By:

Mary Pierson
Mary Pierson, Attorney-in-fact



POWER OF ATTORNEY

Federal Insurance Company
Vigilant Insurance Company
Pacific Indemnity Company

Attn.: Surety Department
15 Mountain View Road
Warren, NJ 07059

Know All by These Presents, That FEDERAL INSURANCE COMPANY, an Indiana corporation, VIGILANT INSURANCE COMPANY, a New York corporation, and PACIFIC INDEMNITY COMPANY, a Wisconsin corporation, do each hereby constitute and appoint R.F. Bobo, Mary Pierson, Philana Berros, and Jody E. Specht of Houston, Texas-----

each as their true and lawful Attorney-in-Fact to execute under such designation in their names and to affix their corporate seals to and deliver for and on their behalf as surety thereon or otherwise, bonds and undertakings and other writings obligatory in the nature thereof (other than bail bonds) given or executed in the course of business, and any instruments amending or altering the same, and consents to the modification or alteration of any instrument referred to in said bonds or obligations.

In Witness Whereof, said FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY have each executed and attested these presents and affixed their corporate seals on this 10th day of May, 2001.

Kenneth C. Wendel
Kenneth C. Wendel, Assistant Secretary

Frank E. Robertson
Frank E. Robertson, Vice President

STATE OF NEW JERSEY } ss.
County of Somerset

On this 10th day of May, 2001

before me, a Notary Public of New Jersey, personally came Kenneth C. Wendel, the companies which executed the foregoing Power of Attorney, and the said Kenneth C. Wendel being by me duly sworn, did depose and say that he is Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY and knows the corporate seals thereof, that the seals affixed to the foregoing Power of Attorney are such corporate seals and were thereto affixed by authority of the By-Laws of said Companies; and that he signed said Power of Attorney as Assistant Secretary of said Companies by like authority; and that he is acquainted with Frank E. Robertson, and knows him to be Vice President of said Companies; and that the signature of Frank E. Robertson, subscribed to said Power of Attorney is in the genuine handwriting of Frank E. Robertson, and was thereto subscribed by authority of said Companies in the presence of me, the Notary Public.



Notary Public State of New Jersey
No. 2231647
Commission Expires Oct 28, 2004

Karen A. Price
Notary Public

Extract from the By-Laws of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY:

"All powers of attorney for and on behalf of the Company may and shall be executed in the name and on behalf of the Company, either by the Chairman or the President or a Vice President or an Assistant Vice President, jointly with the Secretary or an Assistant Secretary, under their respective designations. The signature of such officers may be engraved, printed or lithographed. The signature of each of the following officers: Chairman, President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary and the seal of the Company may be affixed by facsimile to any power of attorney or to any certificate relating thereto appointing Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such power of attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding upon the Company with respect to any bond or undertaking to which it is attached."

I, Kenneth C. Wendel, Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY (the "Companies") do hereby certify that

- (i) the foregoing extract of the By-Laws of the Companies is true and correct,
- (ii) the Companies are duly licensed and authorized to transact surety business in all 50 of the United States of America and the District of Columbia and are authorized by the U. S. Treasury Department; further, Federal and Vigilant are licensed in Puerto Rico and the U. S. Virgin Islands, and Federal is licensed in American Samoa, Guam, and each of the Provinces of Canada except Prince Edward Island; and
- (iii) the foregoing Power of Attorney is true, correct and in full force and effect.

Given under my hand and seals of said Companies at Warren, NJ this 12th day of June, 2001



Kenneth C. Wendel
Kenneth C. Wendel, Assistant Secretary

IN THE EVENT YOU WISH TO NOTIFY US OF A CLAIM, VERIFY THE AUTHENTICITY OF THIS BOND OR NOTIFY US OF ANY OTHER MATTER, PLEASE CONTACT US AT ADDRESS LISTED ABOVE, OR BY Telephone (908) 903-3485 Fax (908) 903-3656 e-mail: surety@chubb.com

CSC

5184334741

06/01 '01 08:46 NO.410 03/05

CSC

06/01 '01 09:06 NO.135 02/04

F010601000187

CERTIFICATE OF AMENDMENT
OF
CERTIFICATE OF INCORPORATION
OF
MOBIL OIL CORPORATION

CSC 45

(Under Section 805 of the Business Corporation Law)

Pursuant to the provisions of Section 805 of the Business Corporation Law, the undersigned President and Secretary, respectively, of Mobil Oil Corporation hereby certify:

FIRST: That the name of the corporation is MOBIL OIL CORPORATION and that said corporation was incorporated under the name of Standard Oil Company of New York.

SECOND: That the Certificate of Incorporation of the corporation was filed by the Department of State, Albany, New York, on the 10th day of August, 1882.

THIRD: That the amendments to the Certificate of Incorporation effected by this Certificate are as follows:

(a) Article 1st of the Certificate of Incorporation, relating to the corporate name, is hereby amended to read as follows:

"1st: The corporate name of said Company shall be, ExxonMobil Oil Corporation".

(b) Article 7th of the Certificate of Incorporation, relating to the office of the corporation is hereby amended to read as follows:

The office of the corporation within the State of New York is to be located in the County of Albany. The Company shall have offices at such other places as the Board of Directors may from time to time determine.

CSC
CSC

5184334741

06/01 '01 08:47 NO.410 04/05
06/01 '01 07:06 NO.133 03/04

FOURTH: That the amendments to the Certificate of Incorporation were authorized by the Board of Directors followed by the holder of all outstanding shares entitled to vote on amendments to the Certificate of Incorporation by written consent of the sole shareholder dated May 22, 2001.

IN WITNESS WHEREOF, this Certificate has been signed this 22nd Day of May, 2001.



F. A. Ribch, President 

STATE OF TEXAS)
)
COUNTY OF DALLAS)

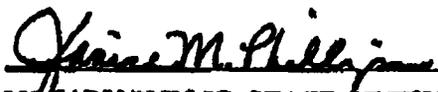
F. L. REID, being duly sworn, deposes and says that he is the Secretary of MOBIL OIL CORPORATION, the corporation mentioned and described in the foregoing instrument; that he has read and signed the same and that the statements contained therein are true.



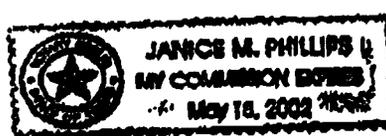
F. L. REID, Secretary

SUBSCRIBED AND SWORN TO before me, the undersigned authority, on this the 22nd day of May, 2001.

[SEAL]



NOTARY PUBLIC, STATE OF TEXAS



CSC
CSC

5184334741

06/01 '01 09:01 NO. 411 02/02
06/01 '01 09:06 NO. 133 06/01
F010601000187

CSC 45

CERTIFICATE OF AMENDMENT

OF

MOBIL OIL CORPORATION

Under Section 805 of the Business Corporation Law

SAC

**STATE OF NEW YORK
DEPARTMENT OF STATE**

100 cc

Filed by: EXXONMOBIL CORPORATION
(Name)

FILED JUN 01 2001

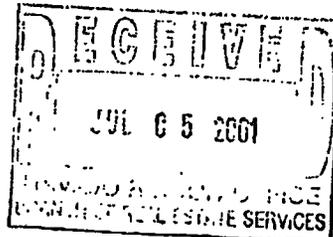
6949 Las Colinas Blvd.
(Mailing address)

TAX \$ _____
BY: *SAC*

Irving, TX 75039-2298
(City, State and Zip code)

ny Albany

Cust Ref # 165578MPJ



010601000195

State of New York }
Department of State } ss:

I hereby certify that the annexed copy has been compared with the original document in the custody of the Secretary of State and that the same is a true copy of said original.

Witness my hand and seal of the Department of State on **JUN 01 2001**



A handwritten signature in black ink, appearing to read "J. H. ...", followed by a long horizontal line extending to the right.

Special Deputy Secretary of State

OPERATOR CHANGE WORKSHEET

1. GLH
2. CDW✓
3. FILE

Change of Operator (Well Sold)

Designation of Agent

X Operator Name Change

Merger

The operator of the well(s) listed below has changed, effective: 06-01-2001	
FROM: (Old Operator):	TO: (New Operator):
MOBIL EXPLORATION & PRODUCTION	EXXONMOBIL OIL CORPORATION
Address: P O BOX DRAWER "G"	Address: U S WEST P O BOX 4358
CORTEZ, CO 81321	HOUSTON, TX 77210-4358
Phone: 1-(970)-564-5212	Phone: 1-(713)-431-1010
Account No. N7370	Account No. N1855

CA No. Unit: RATHERFORD

WELL(S)	SEC TWN RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
RATHERFORD UNIT 1-34	01-41S-23E	43-037-16385	6280	INDIAN	OW	P
RATHERFORD UNIT 1-14	01-41S-23E	43-037-31162	6280	INDIAN	OW	P
RATHERFORD 11-41	11-41S-23E	43-037-31544	6280	INDIAN	OW	P
RATHERFORD UNIT 11-43	11-41S-23E	43-037-31622	6280	INDIAN	OW	P
12-14	12-41S-23E	43-037-15844	6280	INDIAN	OW	P
RATHERFORD UNIT 12-23 (MULTI-LEG)	12-41S-23E	43-037-15846	6280	INDIAN	OW	P
RATHERFORD UNIT 12-34	12-41S-23E	43-037-31126	6280	INDIAN	OW	P
RATHERFORD UNIT 12-12	12-41S-23E	43-037-31190	6280	INDIAN	OW	P
RATHERFORD UNIT 12-21	12-41S-23E	43-037-31201	6280	INDIAN	OW	P
RATHERFORD UNIT 12-43	12-41S-23E	43-037-31202	6280	INDIAN	OW	P
RATHERFORD UNIT 12-32	12-41S-23E	43-037-31203	6280	INDIAN	OW	P
RATHERFORD UNIT 13-41	13-41S-23E	43-037-15856	6280	INDIAN	OW	P
N DESERT CR 32-13 (13-32)	13-41S-23E	43-037-16406	6280	INDIAN	OW	S
RATHERFORD UNIT 13-12	13-41S-23E	43-037-31127	6280	INDIAN	OW	P
RATHERFORD UNIT 13-21	13-41S-23E	43-037-31128	6280	INDIAN	OW	P
RATHERFORD UNIT 13-23	13-41S-23E	43-037-31129	6280	INDIAN	OW	P
RATHERFORD UNIT 13-34 (RE-ENTRY)	13-41S-23E	43-037-31130	6280	INDIAN	OW	P
RATHERFORD UNIT 13-43	13-41S-23E	43-037-31131	6280	INDIAN	OW	P
RATHERFORD UNIT 13-14	13-41S-23E	43-037-31589	6280	INDIAN	OW	P
14-32	14-41S-23E	43-037-15858	6280	INDIAN	OW	P

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 06/29/2001
2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 06/29/2001
3. The new company has been checked through the **Department of Commerce, Division of Corporations Database** on: 04/09/2002
4. Is the new operator registered in the State of Utah: YES Business Number: 579865-0143
5. If **NO**, the operator was contacted on: N/A

6. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BIA-06/01/01

7. **Federal and Indian Units:**

The BLM or BIA has approved the successor of unit operator for wells listed on: 06/01/2001

8. **Federal and Indian Communitization Agreements ("CA"):**

The BLM or BIA has approved the operator for all wells listed within a CA on: N/A

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

DATA ENTRY:

1. Changes entered in the Oil and Gas Database on: 04/12/2002
2. Changes have been entered on the Monthly Operator Change Spread Sheet on: 04/12/2002
3. Bond information entered in RBDMS on: N/A
4. Fee wells attached to bond in RBDMS on: N/A

STATE WELL(S) BOND VERIFICATION:

1. State well(s) covered by Bond Number: N/A

FEDERAL WELL(S) BOND VERIFICATION:

1. Federal well(s) covered by Bond Number: N/A

INDIAN WELL(S) BOND VERIFICATION:

1. Indian well(s) covered by Bond Number: 80273197

FEE WELL(S) BOND VERIFICATION:

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

LEASE INTEREST OWNER NOTIFICATION:

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

COMMENTS:

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE- Other instructions on reverse side.

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator
Exxon Mobil Oil Corporation

3a. Address
P.O. Box 4358, Houston, TX 77210-4358

3b. Phone No. (include area code)
281-654-1936

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
SW/SE 1133' FSL & 1980' FEL, Sec 1, T41S, R23E

5. Lease Serial No.
14-20-603-246A

6. If Indian, Allottee or Tribe Name
Ship Rock

7. If Unit or CA/Agreement, Name and/or No.
UTU68931A

8. Well Name and No.
Ratherford 01-34

9. API Well No.
43-037-16385-01-S1

10. Field and Pool, or Exploratory Area
Aneth

11. County or Parish, State
San Juan County, UT

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input checked="" type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

3/13/06 Move in rig and spotted in equipment.

3/14/06 RU WSU and found out the anchors were no good. RDMO WSU.

3/22/06 MIRU WSU Key Rig # 26. Spot in safety equipment and RU hard lines from the wellhead to pit and pump.

3/23/06 Bled down well. Tubing and casing had 60 psi. Pumped 5 bbls of produce down the tubing, well dead. Unseated pump and POOH with polish rod and subs, LD. POOH with rods, 76 - 1", 131 - 7/8", 3 - 4' stabilizers, and LD pump (1009). Bled down back side but has no pressure. Tried to pump down the back side but it just pressures up. ND wellhead, need to install a 2' spool to NUBOP. RU work floor and tubing tongs, release the TAC, POOH with 2 jts of tubing. PU packer and set it. Psi tested to 500 psi and tested good. POOH and LD packer. POOH with 40 stands and found build up on the outside of the tubing.

3/24/06 Bled well down, tubing and casing had 40 psi. Pumped 2 bbls down the tubing and 10 bbls down the casing. POOH and LD 90 joints of tubing and bottom hole assembly. TIH with 80 joints for kill string.

3/27/06 Bled well down, tubing and casing had 0 psi. Pumped 5 bbls of produce down the tubing and 20 bbls down the casing. TOOH with 25 stands. POOH and LD 30 joints, PU bit and scraper, TBIH with 25 stands and 2 joints, 26 total stands in the hole. PU and TIH with 112 joints of new tubing, have 164 joints in the hole. Made a scraper run to 5255'. TOOH with 60 joints and left 21 stands in the hole for kill string.

***** Continued on page 3 *****

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Tiffany Stebbins

Title **Staff Office Assistant**

Signature

Tiffany Stebbins

Date

05/24/2006

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by _____

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title

Date

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

(Instructions on page 2)

RECEIVED
MAY 26 2006

3/28/06 Bled well down, tubing and casing had 0 psi. Pumped 5 bbls down the tubing and 20 bbls down the tubing. POOH with 21 stands and a single, LD bit and scraper, PU tension packer - 4' sub with on/off tool. TIH with packer and tubing, set packer at 5270'. POOH with 1 stand and circulated the oil & gas out, psi tested the casing to 1000 psi and held good. POOH with 43 stands (86 jts) and tested casing and it leaked off. TIH with 10 more jts and tested casing to 1000 psi (leaked off). TIH with 10 more stands and it leaked off. Have 23 stands in the derrick. Have bad casing around 3078' to 3922'. POOH with tubing and had 33 stands in the derrick.

3/29/06 Bled well down, tubing and casing had 0 psi. Have 33 stands in the derrick, TIH with 2 stands and psi tested the casing to 1100 psi and tested good. TIH with 2 more stands and tested the casing to 1100 psi and tested good. TIH with 2 more stands and tested the casing, this time it didn't hold psi to 1100 psi. TIH with 2 more stands and tested casing, no good. Dumped sand on top of the bridge plug, pumped 10 bbls down.

3/31/06 Bled well down, tubing and casing had 0 psi. TOO H with 52 stands and a single, LD tension packer, TBIH with 61 stands and a single open ended, pumped 80 bbls of fresh water, circulated until fresh water came around on the back side. Spotted in cement trucks, RU hard lines, Balance Plug cement to 3922' to 3200', Pumped about 95 sxs. POOH with 14 stands and a single (29 jts), pressure up and squeeze to 1000 psi. Leaked off a couple of times, had bubbles from different places around the wellhead.

4/03/06 Bled well down, Psi test the casing to 1000 psi and it bled off. TOO H with tubing and stand back 47 stands (94 jts). Made up 32A tension packer, RIH with tubing and tagged cement, had 29 standing back - 52 stands and a single in hole with packer, set and test casing, had communication between the casing and braden head. Worked the packer up the hole testing for casing leaks, found the casing leak between 3360' to 3234', Release packer.

4/04/06 Bled well down, TOO H with tubing and stand back 33 stands and LD packer. RBIH open ended with 106 jts (53 stands) and tagged cement. Came up 2' above cement, circulate 80 bbls of fresh water down the tubing and out the Braden head. Circulated another 60 bbls.

4/05/06 Bled well down, spotted in cement trucks.

4/06/06 Bled well down, did a balance plug in 5.5" casing with cement from 3360' to 3243'. Mix and pump 15 sxs. Pull up, reverse out, try to put 1 bbl behind pipe, came out the hole. POOH with tubing and stood them back, PU stinger and retainer. RBIH with 31 stands and a single (63 jts), set retainer at 1841', sting out and sting back in. RU hard lines, start to pump cement. Circulate out the Braden head. Hole in casing from 2072' to 2049', pumped 337 sxs 65/35 w/adds tail 50 sxs G. Sting out, reverse out, POOH with tubing, stand back 31 stand (62 jts), LD 1 Joint. RBIH with 20 stands (40 jts) for kill string.

4/07/06 Shut down for the weekend, will let the cement jobs cure for the weekend.

4/10/06 Bled well down. TIH with 11 stands and tagged cement at 2019'. TOO H and LD 1 jt. RU water truck and psi tested the casing to 1000 psi for 15 min (good).

4/11/06 Bled well down, TOO H with tubing and stand back, PU Drill Collars (6) with BHA, RIH with 1 jt and 28 stands (57 jts) from the derrick, LD 1 joint. PU power swivel, NU 1 jt. Drill down thru cement - PU 1 joint off the float, MU to power swivel, started drilling down to cement retainer. Drill about 6". Getting very fine returns in the pit. PU 1 joint above the cement.

4/12/06 Bled well down. Started drilling on the cement and retainer, finally drilled thru the retainer. Picked up 8 joints of tubing off the float, drilled down to about 2215' circulating clean.

4/13/06 Bled well down and broke circulation. PU 1 joint, drill down, PU 6 more joints and finally broke thru the cement at 2360'. Worked the tubing up and down with the next joint of tubing. LD swivel, POOH with 15 joints and LD on float. TIH with 19 stands (38 jts), have 95 joints total in hole with BHA, tagged cement at 3006'. PU power swivel with 1 joint of tubing, Psi tested down casing and leaked off 50 psi in 10 mins. Tested for 30 mins., only dropped 50 psi. Continue drilling on cement.

4/14/06 Bled well down and broke circulation, broke out power swivel with 1 jt of tubing and started drilling from 3324'. Kept picking up tubing down to 3421' and hit something hard and tubing started bouncing. Torque to 1520 - worked it awhile, started drilling down, found a piece of the retainer, drilled down to 3547' while circulating fluid.

4/17/06 Bled well down and broke circulation, started drilling down from 3547' until we broke thru the cement, psi test the casing and it held good at 1500 psi.

4/18/06 Bled well down, POOH with 15 joints and lay them down on the float. RIH with 7 stands from the derrick, PU swivel and started drilling down; PU 8 joints drill down while circulating fresh water out. LD swivel and POOH with 8 joints and LD on float. POOH with 34 stands, leaving 21 stands in hole with 3 stands of drill collars with bit.

4/19/06 Bled well down, POOH with 21 stands and LD 6 Drill collars-broke drill bit. PU Scraper and bit, plus 1jts of tubing. TBIH with 81 stands (163 jts). PU 1 joint and circulated the casing with fresh water. Got to the top of the bridge plug, POOH with tubing and LD Bit and Scraper, MU the retrieving head for packer, RIH with 41 stands and a single.

4/20/06 Bled down well, TIH with 163 joints and 10' sub, got on top of the packer and circulated fresh water around. Latch on to packer and release it, POOH with tubing and LD bridge plug. PU BHA, TIH with Ball Plug, Mud Joint, Perf Sub, SN, IPC joint, 5 new joints tubing and TAC. TIH with 113 new joints and 49 old joints tubing. Total of 167 joints in the hole. RD work floor - ND BOP - Set TAC and NU wellhead.

4/21/06 Bled down well, tubing had 20 psi and casing had 20 psi, Pumped 10 bbls of Produce water down the tubing, well dead. PU and TIH with GA and Pump, 2 - 4" stabilizers, 131 - 7/8" rods, 76 - 1" rods, PU 1 - 1" rod to tag. Seated and space out pump. Needed subs to seat pump. LD 2 - 1" rods and PU a 6', 4', and 2' sub., PU polish rod, seat and space out pump 18" off the bottom. Psi tested the tubing to 500 psi and it held good. RD hard line from the wellhead to pit and pump. Clean location, RDMO WSU.

5/01/06 Well returned to production.

5/16/06 Completed well test: 19 BOPD, 399 BWPD, 10 MCFPD.

Division of Oil, Gas and Mining
OPERATOR CHANGE WORKSHEET

ROUTING
1. DJJ
2. CDW

X Change of Operator (Well Sold)

Operator Name Change/Merger

The operator of the well(s) listed below has changed, effective: 6/1/2006	
FROM: (Old Operator): N1855-ExxonMobil Oil Corporation PO Box 4358 Houston, TX 77210-4358 Phone: 1 (281) 654-1936	TO: (New Operator): N2700-Resolute Natural Resources Company 1675 Broadway, Suite 1950 Denver, CO 80202 Phone: 1 (303) 534-4600
CA No.	Unit: RATHERFORD

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 4/21/2006
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 4/24/2006
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 6/7/2006
- Is the new operator registered in the State of Utah: YES Business Number: 5733505-0143
- If **NO**, the operator was contacted on:
- (R649-9-2) Waste Management Plan has been received on: requested
- Inspections of LA PA state/fee well sites complete on: n/a
- Reports current for Production/Disposition & Sundries on: ok
- Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM n/a BIA not yet
- Federal and Indian Units:**
The BLM or BIA has approved the successor of unit operator for wells listed on: not yet
- Federal and Indian Communization Agreements ("CA"):**
The BLM or BIA has approved the operator for all wells listed within a CA on: n/a
- Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 6/12/2006

DATA ENTRY:

- Changes entered in the **Oil and Gas Database** on: 6/22/2006
- Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 6/22/2006
- Bond information entered in RBDMS on: n/a
- Fee/State wells attached to bond in RBDMS on: n/a
- Injection Projects to new operator in RBDMS on: 6/22/2006
- Receipt of Acceptance of Drilling Procedures for APD/New on: n/a

BOND VERIFICATION:

- Federal well(s) covered by Bond Number: n/a
- Indian well(s) covered by Bond Number: PA002769
- (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number n/a
- The **FORMER** operator has requested a release of liability from their bond on: n/a
The Division sent response by letter on: n/a

LEASE INTEREST OWNER NOTIFICATION:

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

COMMENTS:

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

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>Unit Agreement</u>		5. LEASE DESIGNATION AND SERIAL NUMBER: <u>See attached list</u>
2. NAME OF OPERATOR: <u>Resolute Natural Resources Company</u> <u>N2700</u>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: <u>Navajo Tribe</u>
3. ADDRESS OF OPERATOR: <u>1675 Broadway, Suite 1950</u> CITY <u>Denver</u> STATE <u>CO</u> ZIP <u>80202</u>		7. UNIT or CA AGREEMENT NAME: <u>Ratherford Unit</u>
4. LOCATION OF WELL FOOTAGES AT SURFACE: <u>See attached list</u>		8. WELL NAME and NUMBER: <u>See attached list</u>
4. LOCATION OF WELL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: _____		9. API NUMBER: <u>Attached</u>
		10. FIELD AND POOL, OR WILDCAT: <u>Greater Aneth</u>
		COUNTY: <u>San Juan</u>
		STATE: <u>UTAH</u>

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

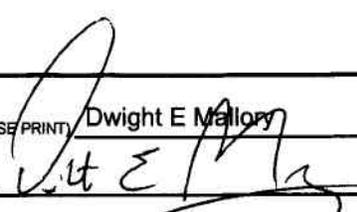
TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input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

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

Effective June 1, 2006 Exxon Mobil Oil Corporation resigns as operator of the Ratherford Unit. Also effective June 1, 2006 Resolute Natural Resources Company is designated as successor operator of the Ratherford Unit.

A list of affected producing and water source wells is attached. A separate of affected injection wells is being submitted with UIC Form 5, Transfer of Authority to Inject.

As of the effective date, bond coverage for the affected wells will transfer to BIA Bond # PA002769.

NAME (PLEASE PRINT) <u>Dwight E Mallory</u>	TITLE <u>Regulatory Coordinator</u>
SIGNATURE 	DATE <u>4/20/2006</u>

(This space for State use only)

APPROVED 6127106
Earlene Russell
Division of Oil, Gas and Mining
Earlene Russell, Engineering Technician

RECEIVED
APR 24 2006
DIV. OF OIL, GAS & MINING

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

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER:
2. NAME OF OPERATOR: ExxonMobil Oil Corporation N1855		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ship Rock
3. ADDRESS OF OPERATOR: P.O. Box 4358 CITY Houston STATE TX ZIP 77210-4358		7. UNIT or CA AGREEMENT NAME: UTU68931A
4. LOCATION OF WELL FOOTAGES AT SURFACE: QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:		8. WELL NAME and NUMBER: Ratherford 9. API NUMBER: attached
		10. FIELD AND POOL, OR WILDCAT: Aneth
		COUNTY: San Juan
		STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: <u>6/1/2006</u>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion:	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

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

ExxonMobil Oil Corporation is transferring operatorship of Greater Aneth field, Ratherford lease to Resolute Natural Resources Company. All change of operator notices should be made effective as of 7:00 AM MST on June 1, 2006.

Attached please find a listing of producers and water source wells included in the transfer.

NAME (PLEASE PRINT) <u>Laurie Kilbride</u>	TITLE <u>Permitting Supervisor</u>
SIGNATURE	DATE <u>4/19/2006</u>

(This space for State use only) **APPROVED** 6/13/06
Earlene Russell
Division of Oil, Gas and Mining
Earlene Russell, Engineering Technician

RECEIVED
APR 21 2006
DIV. OF OIL, GAS & MINING

Ratherford Unit - Producer Well List

minus P&A's

Lease	Number	API #	Status	Lease #	Location					
					Sec	T	R	QTR/QTR	NSFoot	EWFoot
Ratherford	01-14	430373116200S1	Producing	1420603246A	1	41S	23E	SWSW	0660FSL	0660FWL
Ratherford	01-34	430371638501S1	SI	1420603246A	1	41S	23E	SWSE	1133FSL	1980FEL
Ratherford	11-41	430373154400S1	Producing	1420603246A	11	41S	23E	NENE	0860FNL	0350FEL
Ratherford	11-43	430373162201S1	Producing	1420603246A	11	41S	23E	NESE	1980FSL	0660FEL
Ratherford	12-12	430373119000S1	Producing	1420603246A	12	41S	23E	SWNW	1850FNL	0660FWL
Ratherford	12-14	430371584400S1	SI	1420603246A	12	41S	23E	SWSW	0660FSL	4622FEL
Ratherford	12-21	430373120100S1	Producing	1420603246A	12	41S	23E	NENW	0660FNL	1980FWL
Ratherford	12-23	430371584601S1	Producing	1420603246A	12	41S	23E	NESW	1958FSL	3300FEL
Ratherford	12-32	430373120300S1	Producing	1420603246A	12	41S	23E	SWNE	1820FNL	1820FEL
Ratherford	12-34	430373112600S1	Producing	1420603246A	12	41S	23E	SWSE	0675FSL	1905FEL
Ratherford	12-43	430373120200S1	SI	1420603246A	12	41S	23E	NESE	2100FSL	0660FEL
Ratherford	13-12	430373112701S1	Producing	1420603247A	13	41S	23E	SWNW	1705FNL	0640FWL
Ratherford	13-14	430373158900S1	Producing	1420603247A	13	41S	23E	SWSW	0660FSL	0660FWL
Ratherford	13-21	430373112801S1	SI	1420603247A	13	41S	23E	NENW	0660FNL	1920FWL
Ratherford	13-23	430373112900S1	Producing	1420603247A	13	41S	23E	NESW	1980FSL	1930FWL
Ratherford	13-34	430373113001S1	Producing	1420603247A	13	41S	23E	SWSE	0660FSL	1980FEL
Ratherford	13-41	430371585601S1	Producing	1420603247A	13	41S	23E	NENE	660FNL	660FEL
Ratherford	13-43	430373113100S1	Producing	1420603247A	13	41S	23E	NESE	1700FSL	0960FEL
Ratherford	14-32	430371585801S1	Producing	1420603247A	14	41S	23E	SWNE	2130FNL	1830FEL
Ratherford	14-41	430373162300S1	Producing	1420603247A	14	41S	23E	NENE	0521FNL	0810FEL
Ratherford	24-32	430373159300S1	Producing	1420603247A	24	41S	23E	SWNE	2121FNL	1846FEL
Ratherford	24-41	430373113200S1	Producing	1420603247A	24	41S	23E	NENE	0660FNL	0710FEL
Ratherford	17-11	430373116900S1	Producing	1420603353	17	41S	24E	NWNW	1075FNL	0800FWL
Ratherford	17-13	430373113301S1	Producing	1420603353	17	41S	24E	NWSW	2100FSL	0660FWL
Ratherford	17-22	430373117001S1	Producing	1420603353	17	41S	24E	SENE	1882FNL	1910FWL
Ratherford	17-24	430373104400S1	Producing	1420603353	17	41S	24E	SESW	0720FSL	1980FWL
Ratherford	17-31	430373117800S1	Producing	1420603353	17	41S	24E	NWNE	0500FNL	1980FEL
Ratherford	17-33	430373113400S1	Producing	1420603353	17	41S	24E	NWSE	1980FSL	1845FEL
Ratherford	17-42	430373117700S1	Producing	1420603353	17	41S	24E	SENE	1980FNL	0660FEL
Ratherford	17-44	430371573201S1	Producing	1420603353	17	41S	24E	SESE	0660FSL	0660FEL
Ratherford	18-11	430371573300S1	SI	1420603353	18	41S	24E	NWNW	0720FNL	0730FWL
Ratherford	18-13	430371573401S1	Producing	1420603353	18	41S	24E	NWSW	1980FSL	0500FWL
Ratherford	18-22	430373123600S1	Producing	1420603353	18	41S	24E	SENE	2200FNL	2210FWL
Ratherford	18-24	430373107900S1	Producing	1420603353	18	41S	24E	SESW	0760FSL	1980FWL
Ratherford	18-31	430373118101S1	Producing	1420603353	18	41S	24E	NWNE	0795FNL	2090FEL
Ratherford	18-33	430373113501S1	Producing	1420603353	18	41S	24E	NWSE	1870FSL	1980FEL
Ratherford	18-42	430373118200S1	Producing	1420603353	18	41S	24E	SENE	2120FNL	0745FEL
Ratherford	18-44	430373104500S1	SI	1420603353	18	41S	24E	SESE	0660FSL	0660FEL
Ratherford	19-11	430373108000S1	Producing	1420603353	19	41S	24E	NWNW	0660FNL	0660FWL
Ratherford	19-13	430373171900S1	Producing	1420603353	19	41S	24E	NWSW	1980FSL	0660FWL
Ratherford	19-22	430373104601S1	Producing	1420603353	19	41S	24E	SENE	1840FNL	1980FWL
Ratherford	19-24	430373175401S1	Producing	1420603353	19	41S	24E	SESW	0600FSL	1980FWL
Ratherford	19-31	430373104701S1	Producing	1420603353	19	41S	24E	NWNE	510FNL	1980FEL
Ratherford	19-33	430373104800S1	Producing	1420603353	19	41S	24E	NWSE	1980FSL	1980FEL
Ratherford	19-42	430373091600S1	Producing	1420603353	19	41S	24E	SENE	1880FNL	0660FEL
Ratherford	19-44	430373108100S1	Producing	1420603353	19	41S	24E	SESE	0660FSL	0660FEL
Ratherford	19-97	430373159600S1	Producing	1420603353	19	41S	24E	SENE	2562FNL	0030FEL
Ratherford	20-11	430373104900S1	Producing	1420603353	20	41S	24E	NWNW	0500FNL	0660FWL
Ratherford	20-13	430373091700S1	Producing	1420603353	20	41S	24E	NWSW	2140FSL	0500FWL
Ratherford	20-22	430373093000S1	Producing	1420603353	20	41S	24E	SENE	2020FNL	2090FWL
Ratherford	20-24	430373091800S1	Producing	1420603353	20	41S	24E	SESW	0820FSL	1820FWL

Ratherford Unit - Producer Well List

minus P&A's

Lease	Number	API #	Status	Lease #	Location					
					Sec	T	R	QTR/QTR	NSFoot	EWFoot
Ratherford	20-31	430373105001S1	Producing	1420603353	20	41S	24E	NWNE	0660FNL	1880FEL
Ratherford	20-33	430373093100S1	Producing	1420603353	20	41S	24E	NWSE	1910FSL	2140FEL
Ratherford	20-42	430373105100S1	Producing	1420603353	20	41S	24E	SENE	1980FNL	0660FEL
Ratherford	20-44	430373091501S1	Producing	1420603353	20	41S	24E	SESE	0620FSL	0760FEL
Ratherford	20-66	430373159201S1	Producing	1420603353	20	41S	24E	SWNW	1369FNL	1221FWL
Ratherford	20-68	430373159100S1	Producing	1420603353	20	41S	24E	NWSW	1615FSL	1276FWL
Ratherford	15-12	430371571501S1	Producing	1420603355	15	41S	24E	SWNW	1820FNL	0500FWL
Ratherford	15-22	430373044900S1	SI	1420603355	15	41S	24E	SENE	1980FNL	2050FWL
Ratherford	15-32	430371571700S1	Producing	1420603355	15	41S	24E	SWNE	1980FNL	1980FEL
Ratherford	15-33	430371571800S1	Producing	1420603355	15	41S	24E	NWSE	1650FSL	1980FEL
Ratherford	15-41	430371571900S1	TA	1420603355	15	41S	24E	NENE	0660FNL	0660FEL
Ratherford	15-42	430373044800S1	Producing	1420603355	15	41S	24E	SENE	2020FNL	0820FEL
Ratherford	16-13	430373116801S1	Producing	1420603355	16	41S	24E	NWSW	1980FSL	660FWL
Ratherford	16-32	430371572300S1	Producing	1420603355	16	41S	24E	SWNE	1980FNL	1980FEL
Ratherford	16-41	430371572500S1	Producing	1420603355	16	41S	24E	NENE	0660FNL	0660FEL
Ratherford	16-77	430373176800S1	Producing	1420603355	16	41S	24E	NESW	2587FSL	2410FWL
Ratherford	21-23	430371375400S1	Producing	1420603355	21	41S	24E	NESW	1740FSL	1740FWL
Ratherford	21-24	430373172001S1	SI	1420603355	21	41S	24E	SESW	487FSL	2064FWL
Ratherford	21-32	430371575500S1	SI	1420603355	21	41S	24E	SWNE	1880FNL	1980FEL
Ratherford	21-77	430373175801S1	SI	1420603355	21	41S	24E	NWSE	2511FSL	2446FEL
Ratherford	07-11	430373116300S1	Producing	1420603368	7	41S	24E	NWNW	0660FNL	0710FWL
Ratherford	07-13	430373116400S1	Producing	1420603368	7	41S	24E	NWSW	2110FSL	0740FWL
Ratherford	07-22	430373116500S1	Producing	1420603368	7	41S	24E	SENE	1980FNL	1980FWL
Ratherford	07-24	430373116600S1	Producing	1420603368	7	41S	24E	SESW	0880FSL	2414FWL
Ratherford	07-44	430373118900S1	SI	1420603368	7	41S	24E	SESE	0737FSL	0555FEL
Ratherford	08-12	430371599100S1	Producing	1420603368	8	41S	24E	SWNW	1909FNL	0520FWL
Ratherford	08-21	430371599300S1	Producing	1420603368	8	41S	24E	NENW	0616FNL	1911FWL
Ratherford	08-23	430371599400S1	Producing	1420603368	8	41S	24E	NESW	1920FSL	2055FWL
Ratherford	08-32	430371599500S1	Producing	1420603368	8	41S	24E	SWNE	1980FNL	1980FEL
Ratherford	08-34	430371599600S1	Producing	1420603368	8	41S	24E	SWSE	0660FSL	1980FEL
Ratherford	04-34	430371616400S1	Producing	14206034035	4	41S	24E	SWSE	0660FSL	1980FEL
Ratherford	11-14	430371616700S1	Producing	14206034037	11	41S	24E	SWSW	0660FSL	0660FWL
Ratherford	09-34	430371571100S1	SI	14206034043	9	41S	24E	SWSE	0660FSL	1980FEL
Ratherford	10-12	430371571200S1	Producing	14206034043	10	41S	24E	SWNW	1980FNL	0660FWL
Ratherford	10-14	430371571300S1	Producing	14206034043	10	41S	24E	SWSW	0510FSL	0710FWL
Ratherford	10-32	430371571400S1	TA	14206034043	10	41S	24E	SWNE	2080FNL	1910FEL
Ratherford	10-44	430373045100S1	TA	14206034043	10	41S	24E	SESE	0820FSL	0510FEL
Ratherford	29-11	430373105300S1	Producing	1420603407	29	41S	24E	NWNW	0770FNL	0585FWL
Ratherford	29-22	430373108200S1	Producing	1420603407	29	41S	24E	SENE	2130FNL	1370FWL
Ratherford	29-31	430373091401S1	Producing	1420603407	29	41S	24E	NWNE	0700FNL	2140FEL
Ratherford	29-33	430373093200S1	SI	1420603407	29	41S	24E	NWSE	1860FSL	1820FEL
Ratherford	29-34	430371534000S1	SI	1420603407	29	41S	24E	SWSE	0817FSL	2096FEL
Ratherford	29-42	430373093700S1	SI	1420603407	29	41S	24E	SENE	1850FNL	0660FEL
Ratherford	30-32	430371534200S1	Producing	1420603407	30	41S	24E	SWNE	1975FNL	2010FEL
Ratherford	28-11	430373044600S1	Producing	1420603409	28	41S	24E	NWNW	0520FNL	0620FWL

Ratherford Unit - Producer Well List

minus P&A's

Lease	Number	API #	Status	Lease #	Location					
					Sec	T	R	QTR/QTR	NSFoot	EWFoot
Ratherford	09-12	430371512600S1	Producing	14206035045	9	41S	24E	SWNW	1865FNL	0780FWL
Ratherford	09-14	430371512700S1	Producing	14206035046	9	41S	24E	SWSW	0695FSL	0695FWL
Ratherford	04-14	430371616300S1	Producing	14206035446	4	41S	24E	SWSW	0500FSL	0660FWL
Ratherford	03-12	430371562000S1	Producing	14206036506	3	41S	24E	SWNW	2140FNL	0660FWL

Water Source Wells (Feb 2006)

RU	S1	4303700001	Active
RU	S2	4303700002	Active
RU	S3	4303700003	Active
RU	S4	4303700004	Active
RU	S5	4303700005	Active
RU	S6	4303700006	Active
RU	S7	4303700007	Active
RU	S8	4303700008	Active
RU	S9	4303700009	Active
RU	S10	4303700010	Active
RU	S11	4303700011	Active
RU	S12	4303700012	Active
RU	S13	4303700013	Active
RU	S14	4303700014	Active
RU	S16	4303700016	Active
RU	S17	4303700017	Active

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: 14-20-603-246A
---	---

SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: NAVAJO 7. UNIT or CA AGREEMENT NAME: RATHERFORD
--	--

1. TYPE OF WELL Oil Well	8. WELL NAME and NUMBER: RATHERFORD UNIT 1-34
------------------------------------	---

2. NAME OF OPERATOR: RESOLUTE NATURAL RESOURCES	9. API NUMBER: 43037163850000
---	---

3. ADDRESS OF OPERATOR: 1675 Boradway Ste 1950 , Denver, CO, 80202	PHONE NUMBER: 303 534-4600 Ext	9. FIELD and POOL or WILDCAT: GREATER ANETH
--	--	---

4. LOCATION OF WELL FOOTAGES AT SURFACE: 1133 FSL 1980 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 01 Township: 41.0S Range: 23.0E Meridian: S	COUNTY: SAN JUAN STATE: UTAH
---	---

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 1/28/2014 <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input checked="" type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>

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

Resolute will attempt to repair parted rods and tubing in the subject well to enhance oil production. The proposed procedure and well bore schematic are attached. Work is to commence in late January or early February.

Accepted by the Utah Division of Oil, Gas and Mining

Date: January 08, 2014

By: *Derek Quist*

NAME (PLEASE PRINT) Sherry Glass	PHONE NUMBER 303 573-4886	TITLE Sr Regulatory Technician
SIGNATURE N/A		DATE 1/8/2014

RESOLUTE

NATURAL RESOURCES

RU 1-34

1133' FSL, 1980' FEL

SWSE section 1-T41S-R23E

43-037-16385

Parted Rods

Job Scope

Job Scope includes: psi test tubing, POOH with rods and plunger, Fish parted rods and inspect rods. Pull tubing if needed, replace with seamless FBNAU tbg with upsized tubing pump barrel (2" to 2-1/4"). Test tbg, and return well to production.

(Acid planned? **N**; Change of tubing size? **N**; Paraffin expected? **N**)

Work History

3/23/2006: Casing cement squeeze at 3922' to 3200' and 2072' to 2049', Ran new tubing and rods.

4/2/2010: Tubing Repair - Stuck pump; 134th rod 5' down; rods had bunched up & stuck in tbg @ 4309'. Ran YB Tbg & new KD rods.

1/27/2011: Tubing Leak - Discovered csg leak(s), ran csg inspection log - csg in bad condition; CIBP set at 5324', ran 88 jts kill string.

1/9/2012: Ran liner, End of 4" liner at 5244'. Ran new seamless tubing. Ran new KD Rods.

10/1/2012: Rod Repair - 7/8" rod box parted at 212'. Replaced 4 x 7/8" rods in the area of the part & one other damaged one @ 2262'.

11/14/2012: Rod Repair - Parted 7/8" slim hole box on 23rd rod; fished rods down to on-off tool; PT tbg to 1100 psi - Good; Re-ran rods & replaced all 53 x 7/8" slim hole rod boxes & ran one guided 3/4" rod on bottom.

4/25/2013: Tubing Leak - Dump Valve Parted @ 5221', Tubing pump barrel was pitted. Clean out w/N2 to 5323' KB; Ran 20 jts new SMLS tubing below 4652.8' KB.

8/7/2013: Rod Repair - Pulled & LD KD-63 rods, Found on/off tool parted at the receiver; Pulled tbg, made bit & scraper run to 5238' (btm of liner 5245'); Tag with bit 5320' KB = PBD/no fill; Re-ran tubing & 2-1/4" tbg barrel pump with 10 new SMLS jts below 4961' KB; Ran new all 7/8" T-66 SH cplg rod string.

12/10/2013: Rod Repair - PT'd tubing to 1500 psi - good test; Pulled 7/8 rods down to parted T-66 slim hole box at #23, Latched fish, released from on/off tool, pulled rod string; Replaced broken rod box & on/off tool, RIH & re-latched on/off.

Procedure

Horsley Witten: No

1. MIRU WSU, LOTO, Kill well as necessary.
2. Pressure test tubing to 1500 psig.
3. POOH with rods and on-off tool for tbg pump, fishing as required for parted rods. Stand back and inspect rods, Call and notify Bill Albert 970-371-9682, if unavailable then contact Tech Support (Virgil Holly @ 435-444-0020 or Julius Claw @ 435-444-0156).
4. Prepare to pull tubing if step 2 PT fails (if PT is good, go to step 9): NDWH, NUBOP,
5. Unseat Tubing anchor, tag for fill, POOH with tbg & pump barrel; if needed, LD & send in for inspection.
6. If needed, TIH with bit and scraper and N2 clean out to CIBP @ 5324', POOH and LD Bit & Scraper.
7. MU new BHA & RIH with replacement 2-3/8 inch Seamless FBNAU tubing , if required.
8. Set tubing anchor, land tubing, NDBOP, NUWH.
9. RIH with new on-off tool and any replacement rods necessary, latch onto pump plunger.
10. Long stroke the pump to test for good action.
11. If pump action is good, make sure to leave enough polish rod for operators to correctly space pump as required.
12. Notify the Operator that well is ready to return back to production.
13. RDMOL. Hook up appropriate chemical treatment.

Well Name Rutherford U 0134	API Number 4303716385	Qtr/Qtr SW SE	Section 1	TWN 41S	Range 23E	Regulatory Spud Date 1/24/1961	Field Name Rutherford	State/Province Utah
Original KB Elevation (ft) 4,624.00		KB-Ground Distance (ft) 13.00		Total Depth (ftKB) 5584'		PBTD (All) (ftKB)		

Horizontal - Original Hole, 1/7/2014 3:21:52 PM

MD (ftKB)	TV D (ftKB)	Incl (°)	DLS Curve	Vertical schematic (actual)	Formations - Drilling	BH Core	SW Core	Eval - Samples	Eval - Litho	Mud	Drill Params 1	Drill Params2	
			DLS...								Dens (lb...)	Int R...	Bit RPM (rpm)
												Q Flow (gpm)	
												WOB (1000lbf)	
0.3													
25.9													
32.2													
98.1													
1,461.0													
2,019.0													
2,411.1													
4,615.2													
4,948.2													
5,078.7													
5,202.4													
5,245.1													
5,282.2													
5,287.1													
5,299.9													
5,315.0													
5,329.1													
5,418.0													
5,431.1													
5,452.1													
5,457.0													
5,469.2													
5,472.1													
5,480.0													
5,496.1													
5,507.9													
5,527.9													
5,542.0													
5,545.9													
5,584.0													
5,604.0													

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
		5. LEASE DESIGNATION AND SERIAL NUMBER: 14-20-603-246A
SUNDRY NOTICES AND REPORTS ON WELLS		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: NAVAJO
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		7. UNIT or CA AGREEMENT NAME: RATHERFORD
1. TYPE OF WELL Oil Well		8. WELL NAME and NUMBER: RATHERFORD UNIT 1-34
2. NAME OF OPERATOR: RESOLUTE NATURAL RESOURCES		9. API NUMBER: 43037163850000
3. ADDRESS OF OPERATOR: 1700 Lincoln Street, Suite 2800 , Denver, CO, 80203 4535	PHONE NUMBER: 303 534-4600 Ext	9. FIELD and POOL or WILDCAT: GREATER ANETH
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1133 FSL 1980 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 01 Township: 41.0S Range: 23.0E Meridian: S		COUNTY: SAN JUAN
		STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start: <input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 5/5/2014 <input type="checkbox"/> SPUD REPORT Date of Spud: <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> DEEPEN <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> PLUG BACK <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> TEMPORARY ABANDON <input checked="" type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> OTHER	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
Resolute Natural Resources submits this sundry as notice that the tubing repair for the above well was completed on 5/6/2014 according to previously submitted procedures.		Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY June 24, 2014
NAME (PLEASE PRINT) Erin Joseph	PHONE NUMBER 303 573-4886	TITLE Sr. Regulatory Analyst
SIGNATURE N/A		DATE 6/23/2014