

Scout Report sent out

Noted in the NID File

Location map pinned

Approval or Disapproval Letter

Date Completed, P. & A. or operations suspended

6-14-59

Pin changed on location map

Affidavit and Record of A & P

Water Shut-Off Test

Gas-Oil Ratio Test

Well Log Filed

Started Injecting as of June 3, 1963

FILE NOTATIONS

Entered in NID File

Checked by Chief

Entered in NID File

Copy NID to PHH Office

Location Map Pinned

Approval Letter

cause #17

Completed

Approval Letter

IWR to ...

COMPLETED: Suspended 40-Acre Test Well

Date Well Completed

7-14-59

Location Pinned

OW ...

Board of Land

OW ...

State of Fee Land

LOGS FILED

Electric Log *12-2-59*

Electric Logs (No.) *4*

E

I

E-I

GR

GR-N

Micro

Lat

M-L

Sonic

Others

*Formation Tester
Induction-Electrical Log
Inclusion - Janina Road*

UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS: WELL LOG X ELECTRIC S 4=FILE X WATER SANDS LOCATION: ECTED SUB. REPORT/ 6-23-64

Test Well - Cause #17

WI

*Subsequent Report of Acidizing

**Letter dated 6-8-64 stating that this well is to be converted to a Water Injection Well.

11-19-64 Notice to acidize

1-13-67 Subsequent Report of shooting + acidizing

DATE FILED 4-28-59

New Shact #2

LAND: FEE & PATENTED STATE LEASE NO.

PUBLIC LEASE NO.

INDIAN 14-20-603-247

DRILLING APPROVED: 4-28-59

+ Started Drilling

SPUDDER IN: 5-8-59 *3-18-63

**6-3-64 (Date Converted)

COMPLETED *Suspended* 6-14-59 PUT TO PRODUCING: *3-21-63

**603 BWPD Vacuum *thru 19/64*

INITIAL PRODUCTION: *88 BOPD; 3 BWPD; 296 MCFG/D

Chobn

GRAVITY A.P.S.

GOR:

PRODUCING ZONES: 5421'-5588' "Open Hole"

TOTAL DEPTH: 5588'

WELL ELEVATION: 4652' KB 4639'G

DATE ABANDONED:

FIELD: ~~Ratherford~~ *Aneth*

UNIT: Ratherford

COUNTY: San Juan

WELL NO. NORTH DESERT CREEK 32-13 (RATHERFORD 13W32)

AD 43-037-16406

LOCATION 1881' FT. FROM (N) ~~CO~~ LINE, 1979'

FT. FROM (E) ~~SW~~ LINE.

SW NE

¼-¼ SEC. 13

7

TWP. RGE. SEC. OPERATOR

TWP. RGE. SEC. OPERATOR:

UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS: WELL LOG ELECTRIC FILE WATER SANDS LOCATION RECORDED SUB. REPORT/

Test Well - Cause #17

*Subsequent Report of Acidizing

**Letter dated 6-8-64 stating that this well is to be converted to a Water Injection Well.

DATE FILED 4-28-59

LAND: FEE & PATENTED STATE LEASE NO. PUBLIC LEASE NO. INDICATE 14-20-603-247

DRILLING APPROVED: 4-28-59

SPUDDED IN: 5-8-59 *3-18-63 **6-3-64 (Date Converted)

COMPLETED: 6-14-59 PUT TO PRODUCING: *3-21-63 **603 BWPD Vacuum

INITIAL PRODUCTION: *88 BOPD; 3 BWPD; 296 MCFG/D

GRAVITY A.P.

GOR:

PRODUCING ZONES: 5421'-5588' "Open Hole"

TOTAL DEPTH: 5588'

WELL ELEVATION: 4652' KB

DATE ABANDONED:

FIELD: ~~Ratherford~~ *Aruth*

UNIT: Ratherford

COUNTY: San Juan

WELL NO. NORTH DESERT CREEK 32-13 (RATHERFORD 13W32)

LOCATION 1881' FT. FROM (N) LINE, 1979' FT. FROM (E) LINE, SW NE 13

TWP.	RGE.	SEC.	OPERATOR	TWP.	RGE.	SEC.	OPERATOR
41 S	23 E	13	WHILLIPS	41 S	23 E	13	SHELL OIL COMPANY

GEOLOGIC TOPS:

ELECTRIC LOG TOPS

QUATERNARY	Star Point	Chinle		Molas
Alluvium	Wahweap	Shinarump	2204' EL	Manning Canyon
Lake beds	Masuk	Moenkopi	2255' EL	Mississippian
Pleistocene	Colorado	Sinbad		Humbug
Lake beds	Sego	PERMIAN		Brazer
TERTIARY	Buck Tongue	Kaibab		Pilot Shale
Pliocene	Castlegate	Coconino		Madison
Salt Lake	Mancos	Cutler	2341' EL	Leadville
Oligocene	Upper	Huskinnini		Redwall
Norwood	Middle	DeChelly		DEVONIAN
Eocene	Lower	White Rim		Upper
Duchesne River	Emery	Organ Rock		Middle
Uinta	Blue Gate	Cedar Mesa		Lower
Bridger	Ferron	Halgaita Tongue		Ouray
Green River	Frontier	Phosphoria		Elbert
	Dakota	Park City		McCranken
	Burro Canyon	Rico (Goodridge)		Aneth
	Cedar Mountain	Supai		Simonson Dolomite
	Buckhorn	Wolfcamp		Sevy Dolomite
	JURASSIC	CARBONIFEROUS		North Point
Wasatch	Morrison	Pennsylvanian		SILURIAN
Stone Cabin	Salt Wash	Oquirrh		Laketown Dolomite
Colton	San Rafael Gr.	Weber		ORDOVICIAN
Flagstaff	Summerville	Morgan		Eureka Quartzite
North Horn	Bluff Sandstone	Hermosa	4409' EL	Pogonip Limestone
Almy	Curtis			CAMBRIAN
Paleocene	Entrada	Pardox	5403' EL	Lynch
Current Creek	Moab Tongue	Ismay		Bowman
North Horn	Carmel	Desert Creek		Tepeats
CRETACEOUS	Glen Canyon Gr.	Akah		Ophir
Montana	Navajo	Barker Creek		Tintic
Mesaverde	Kayenta			PRE-CAMBRIAN
Price River	Wingate	Cane Creek		
Blackhawk	TRIC			



SHELL OIL COMPANY

705 West Municipal Drive
Farmington, New Mexico

April 27, 1959

State of Utah
Oil and Gas Conservation Commission
310 Newhouse Building
Salt Lake City, Utah

Gentlemen:

Attached for your approval are Notices to Drill on three 40-acre spaced wells in the Greater Aneth Area. These wells were provided for and are to be drilled under the terms of the Commission's order for gathering spacing data in five test wells. Your favorable consideration will be appreciated.

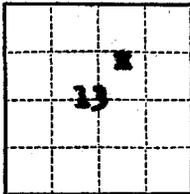
Very truly yours,

R. R. Robison
Division Production Manager

Attachments

(SUBMIT IN TRIPPLICATE)

Indian Agency Navajo



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Allottee Tribal Lands

Lease No. 11-20-603-247

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)

April 27, 1959

North Desert Creek

Well No. 32-13 is located 1681 ft. from [N] line and 1979 ft. from [E] line of sec. 13

13 (1/4 Sec. and Sec. No.) 11S (Twp.) 23R (Range) S10M (Meridian)
North Desert Creek (Field) San Juan (County or Subdivision) Utah (State or Territory)

The elevation ~~of the well~~ is 4639 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 20" hole to 80'.
2. Cement 16" conductor pipe at 80' with 50 sacks cement.
3. Drill 13-3/4" hole to 1385'+
4. Cement 10-3/4" casing at 1385'+ (depending on water flow) with 300 sacks construction cement. (Circulated)
5. Drill 9" hole to 5410'+.
6. Cement 7" casing at 5410'+ with 200 sacks construction cement.
7. Core 6-1/8" hole to 5570' (Paradox).
8. Make wireline tests and conventional tests of open hole interval 5410'+ to 5570'+.
9. Wash with 250 gallons mud acid and inject 3000 gallons acid and 4000 gallons retarded acid.
10. Make production tests.

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 705 West Municipal Drive
Farmington, New Mexico

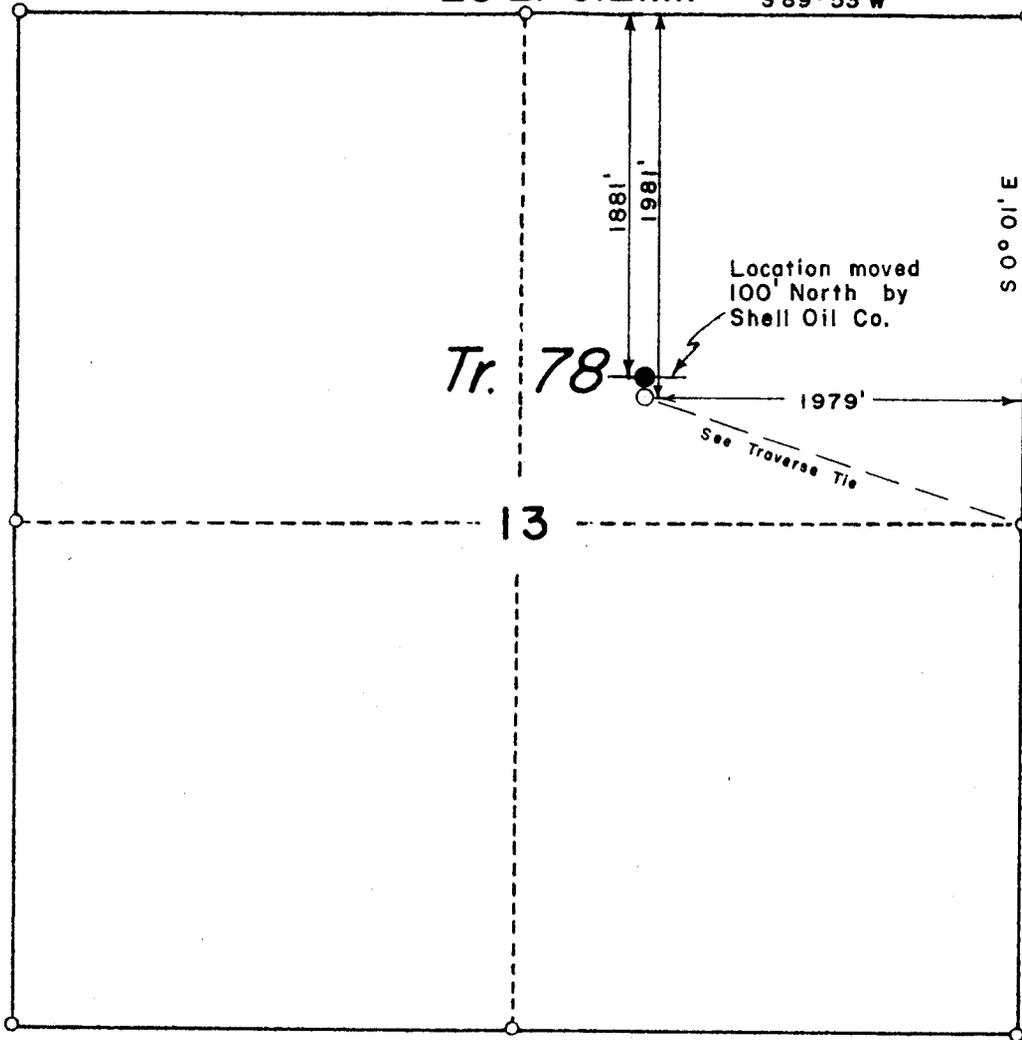
Original signed by
R. S. MacALISTER, JR.
By N. S. Mac Alister, Jr.
Title Division Exploitation Engineer

To NW Cor. Tract 78 10,563.9'

R. 23 E. S. L. M.

S 89° 53' W

B.L.M. Brass Cap Found



ELEVATION DATA

GROUND	4639' U.G.
MATT	
D.F	
K.B	
B.M.	4646.2'

REFERENCE POINT DATUM-

1"X2" STAKES SET AT 10' N,S,E, & W. OF LOC

1"x2" stake and 3' flag set at 189'N., 135'S., 203'W. & 205'E. of Loc.

1"x4" angle iron stake and 10' flag set at Loc. being 1979'W. & 1981'

South of the NE Cor. of Sec. 13, Tr. 78, T.41S., R.23E., S.L.M.

1"x2" hub and 3' flag bears North 189' for B.M.

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

Aug. 28, 1957

John A. Kroeger
 John A. Kroeger, L.S.
 Utah Reg. No. 1648



Drawn By: Ritter	SHELL OIL COMPANY	Scale 1" = 1000'
Checked By: A.C.T.		220-635
Date: Aug. 28, 1957		

LOCATION OF N. DESERT CREEK 32 - 13

SAN JUAN COUNTY, UTAH, Tr. 78, SEC. 13, T.41S., R.23E., S.L.M.

April 28, 1959

Shell Oil Company
705 West Municipal Drive
Farmington, New Mexico

Attention: R. S. MacAlister, Jr.,
Division Exploitation Engineer

Gentlemen:

With reference to your notice of intention to drill Well No. North Desert Creek 32-13, which is to be located 1881 feet from the north line and 1979 feet from the east line of Section 13, Township 41 South, Range 23 East, S1EM, San Juan County, Utah, please be advised that approval to drill said well is hereby granted subject to the Order which was issued in Cause No. 17 (Combined Causes No. 8 and 11), as a result of the hearing held on February 2 and 3, 1959.

Yours very truly,

OIL & GAS CONSERVATION COMMISSION

CLEON B. FEIGHT
EXECUTIVE SECRETARY

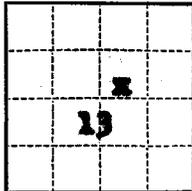
CBF:co

cc: J. A. Anderson,
Regional Oil & Gas Supervisor
U.S.G.S.
Roswell, New Mexico

P. T. McGrath, District Engineer
U.S.G.S.
Farmington, New Mexico

(SUBMIT IN TRIPLICATE)

Indian Agency Havajo



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Allottee Tribal Lands

Lease No. 11-20-603-247

2/14

6/8/59

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)

May 26, 1959

North Desert Creek
Well No. 32-13 is located 1081 ft. from N line and 1979 ft. from E line of sec. 13

NE 13 (1/4 Sec. and Sec. No.) L1S (Twp.) 23E (Range) SL13M (Meridian)
Bathurford (Field) San Juan (County or Subdivision) Utah (State or Territory)

The elevation of the Kelly Pushing ~~static level~~ above sea level is 1652 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 5-8-59.

5-8-59 Ran and cemented 16" conductor pipe at 70' with 105 sacks cement treated with 2% calcium chloride. Drilled to 1381'.

5-11-59 Ran and cemented (1365') 10-3/4", 32#, J-55 casing at 1378' with 200 sacks cement treated with 2% calcium chloride. Good returns to surface. 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 705 West Municipal Drive

Farmington, New Mexico

Original signed by
B. W. SHEPARD

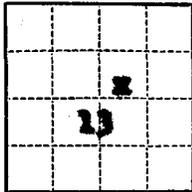
By _____

B. W. Shepard

Title Exploitation Engineer

(SUBMIT IN TRIPLICATE)

Indian Agency Navajo



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Allottee Tribal Lands

Lease No. 11-20-603-247

711 A
48/59

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.....	
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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)

May 26, 1959

North Desert Creek

Well No. 32-13 is located 1081 ft. from N line and 1979 ft. from E line of sec. 13

13 (1/4 Sec. and Sec. No.) 11S (Twp.) 23E (Range) S10W (Meridian)
Rutherford (Field) San Juan (County or Subdivision) Utah (State or Territory)

Kelly Drilling

The elevation of the ~~static level~~ above sea level is 1652 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 5-8-59.

5-8-59 Ran and cemented 16" conductor pipe at 70' with 105 sacks cement treated with 2% calcium chloride. Drilled to 1301'.

5-11-59 Ran and cemented (1365') 10-3/4", 32#, J-55 casing at 1370' with 200 sacks cement treated with 2% calcium chloride. Mud returns to surface. 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 705 West Municipal Drive

Farmington, New Mexico

Original signed by
B. W. SHEPARD

By B. W. Shepard

Title Exploitation Engineer

Comm. 2417-3

CAUSE 17
Commission Exhibit Number _____

Shell North Desert Creek 32 - 13

Contents:

Results of Pressure Tests Numbered:

S - 1
S - 2
S - 3
S - 3a
S - 4
S - 5
S - 6
S - 7
S - 8
S - 9
S - 10
S - 11
S - 12
B - 13
B - 14a
B - 15
B - 16

Daily Operations Reports Dated:
5-27-59 to 6-14-59

Logs:

Schlumberger Induction - Electrical Log
Schlumberger Induction - Gamma Ray Log
Schlumberger Induction - Gamma Ray-Neutron Log
Schlumberger Induction - Caliper Log

Bottom Hole Pressure Data Sheet

RATHERFORD Field
Well NORTH DESERT CREEK 32-13

Type Tester SCHLUMBERGER WL Number of Test S-1
Interval Tested _____ To _____ Date of Test 6-5-59
Point Tested 5432'

Time in Hole 3:00 AM/PM Time on Bottom _____ AM/PM
Time Open Period Began 3:43 AM/PM Time Open Period Finished 4:43 AM/PM
Time Off Bottom _____ AM/PM Time Out of Hole 5:30 AM/PM

Length of Open Period From Above 1 HR Length of Open Period From Pressure Chart 60 MIN

Sample (Air) Chamber Volume 250 CC Recovery _____

Recorder No. HK 1020 Element No. 12017N Range 2900

Clock No. 3674 Range 3 HR

Open Period:

Depth of Recorder 5440 (Inside/Outside)

Time	Deflect In.	Pressure PSIG				
0	—					
5	1.0939	1585				
10	1.0989	1592				
20	1.0998	1592				
30	1.1005	1594				
40	1.1005	1594				
50	1.1010	1595				
60	1.1011	1595				

Hydrostatic Gradient Stops:

Recorder Depth Feet	Time	Defl. In.	Pressure PSIG	ΔP PSI	ΔD Feet	$\Delta P/\Delta D$ PSI/Feet
5436		1.7197	2498			
5136		1.6302	2367			
5236		1.6612	2412			
5336		1.6925	2458			

Remarks:

Bottom Hole Pressure Date Sheet

RATHERFORD Field
Well NORTH DESERT CREEK 32-13

Type Tester SCHLUMBERGER WL Number of Test 5-1
Interval Tested _____ To _____ Date of Test 6-5-59
Point Tested 5432'

Time in Hole 3:00 AM/PM Time on Bottom _____ AM/PM
Time Open Period Began 3:43 AM/PM Time Open Period Finished 4:43 AM/PM
Time Off Bottom _____ AM/PM Time Out of Hole 5:30 AM/PM

Length of Open Period From Above 1 HR Length of Open Period From Pressure Chart 60

Sample (Air) Chamber Volume 250 cc Recovery _____

Recorder No. HK 14206 Element No. 2409N Range 3750

Clock No. 5347 Range 3 HR

Open Period:

Depth of Recorder 5440 (Inside/Outside)

Time	Deflect In.	Pressure PSIG			
0	-				
5	.8501	1599			
10	.8521	1602			
20	.8530	1604			
30	.8529	1604			
40	.8529	1604			
50	.8529	1604			
60	.8530	1604			

Hydrostatic Gradient Stops:

Recorder Depth Feet	Time	Defl. In.	Pressure PSIG	ΔP PSI	ΔD Feet	ΔP/ΔD PSI/Feet
5436		1.3295	2510			
5136		1.2602	2378			
5236		1.2841	2424			
5336		1.3079	2469			

Remarks:

Bottom Hole Pressure Data Sheet

RATHERFORD Field

Well NDC 32-13

Type Tester SCHLUMBERGER WL Number of Test S-2
 Interval Tested _____ To _____ Date of Test 6-5-59
 Point Tested 5436.5'

Time in Hole 11:15 AM/PM Time on Bottom _____ AM/PM
 Time Open Period Began 12:02 AM/PM Time Open Period Finished 1:37 AM/PM
 Time Off Bottom _____ AM/PM Time Out of Hole 2:00 AM/PM

Length of Open Period From Above 95 MIN. Length of Open Period From Pressure Chart 94.8 MIN

Sample (Air) Chamber Volume 250 CC Recovery _____

Recorder No. HK1020 Element No. (12017N) Range _____

Clock No. 3674 Range 3 HR

Open Period:

Depth of Recorder 5444.5 (Inside/Outside)

Time	Deflect In.	Pressure PSIG			
0	.0012	2	50	1.1033	1598
1	.3476	502	60	1.1039	1599
5	.5410	782	70	1.1041	1599
10	.7632	1104	80	1.1046	1600
15	.9622	1394	90	1.1048	1600
20	1.0456	1515	95	1.1051	1602
30	1.0940	1585			
40	1.1018	1596			

Hydrostatic Gradient Stops:

Recorder Depth Feet	Time	Defl. In.	Pressure PSIG	ΔP PSI	ΔD Feet	ΔP/ΔD PSI/Feet
<u>5442.5'</u>		<u>1.7194</u>	<u>2498</u>			

Remarks:

Bottom Hole Pressure Date Sheet

RATHERFORD Field

Well NOC 32-13

Type Tester SCHLUMBERGER WL Number of Test S-2
 Interval Tested _____ To _____ Date of Test 6-5-59
 Point Tested 5436.5

Time in Hole 11:15 AM/PM Time on Bottom _____ AM/PM
 Time Open Period Began 12:02 AM/PM Time Open Period Finished 1:37 AM/PM
 Time Off Bottom 2:00 AM/PM Time Out of Hole _____ AM/PM

Length of Open Period From Above 95 MIN Length of Open Period From Pressure Chart 93.8 MIN

Sample (Air) Chamber Volume 250 cc Recovery _____

Recorder No. HK 14206 Element No. (2409N) Range _____

Clock No. 5347 Range 3 HR

Open Period:

Depth of Recorder 5444.5 (Inside/Outside)

Time	Deflect In.	Pressure PSIG			
0	.0068	13	50	.8554	1609
1	.2755	516	60	.8561	1610
5	.4510	844	70	.8559	1610
10	.6447	1210	80	.8560	1610
15	.7662	1440	90	.8563	1611
20	.8220	1546	94	.8560	1610
30	.8503	1599			
40	.8547	1608			

Hydrostatic Gradient Stops:

Recorder Depth Feet	Time	Defl. In.	Pressure PSIG	ΔP PSI	ΔD Feet	ΔP/ΔD PSI/Feet
5442.5'		1.3287	2510			

Remarks:

Bottom Hole Pressure Date Sheet

RATHERFORD Field

Well NDC 32-13

Type Tester SCHLUMBERGER WL Number of Test S-3 (MISRUN)
 Interval Tested _____ To _____ Date of Test 6-6-59
 Point Tested 5446.5

Time in Hole 3:00 AM/PM AM Time on Bottom _____ AM/PM
 Time Open Period Began 3:30 AM/PM AM Time Open Period Finished _____ AM/PM
 Time Off Bottom _____ AM/PM Time Out of Hole _____ AM/PM

Length of Open Period From Above MIS RUN Length of Open Period From Pressure Chart _____

Sample (Air) Chamber Volume 250cc Recovery _____

Recorder No. HK 1026 Element No. (12017N) Range _____

Clock No. 3674 Range 3 HR

Open Period:

Depth of Recorder _____ (Inside/Outside)

Time	Deflect In.	Pressure PSIG				

Hydrostatic Gradient Stops:

Recorder Depth Feet	Time	Defl. In.	Pressure PSIG	ΔP PSI	ΔD Feet	ΔP/ΔD PSI/Feet
<u>5446.5'</u>		<u>1.7251</u>	<u>2506</u>			

Remarks:

Bottom Hole Pressure Date Sheet

RATHERFORD Field

Well NDC 32-13

Type Tester SCHLUMBERGER WL Number of Test S-3 (MISRUN)
 Interval Tested _____ To _____ Date of Test 6-6-59
 Point Tested 5440.5

Time in Hole 3:00 AM/PM AM Time on Bottom _____ AM/PM
 Time Open Period Began 3:30 AM/PM AM Time Open Period Finished _____ AM/PM
 Time Off Bottom _____ AM/PM Time Out of Hole _____ AM/PM

Length of Open Period SHAPE CHARGE BLOCK Length of Open Period
 From Above FAILED From Pressure Chart _____

Sample (Air) Chamber Volume 250 cc Recovery _____

Recorder No. HK 14206 Element No. 2409N Range 3750

Clock No. 5347 Range 3 HR

Open Period:

Depth of Recorder _____ (Inside/Outside)

Time	Deflect In.	Pressure PSIG				

Hydrostatic Gradient Stops:

Recorder Depth Feet	Time	Defl. In.	Pressure PSIG	ΔP PSI	ΔD Feet	ΔP/ΔD PSI/Feet
<u>5446.5'</u>		<u>1.3308</u>	<u>2520</u>			

Remarks:

Bottom Hole Pressure Date Sheet

RATHERFORD Field

Well NDC 32-13

Type Tester SCHLUMBERGER WL Number of Test S-3A
 Interval Tested _____ To _____ Date of Test 6-6-59
 Point Tested 5440.5

Time in Hole 5:15 AM/PM Time on Bottom _____ AM/PM
 Time Open Period Began 6:04 AM/PM Time Open Period Finished 8:05 AM/PM
 Time Off Bottom _____ AM/PM Time Out of Hole 8:30 AM/PM

Length of Open Period From Above 121 MIN Length of Open Period From Pressure Chart 118 MIN

Sample (Air) Chamber Volume 250 cc Recovery _____

Recorder No. HK 1020 Element No. (12017N) Range _____

Clock No. 3674 Range 3 HR

Open Period:

Depth of Recorder 5448.5 (Inside/Outside)

Time	Deflect In.	Pressure PSIG			
			40	.3913	565
0	.0070	10	50	.4457	644
1	.3363	487	60	.4820	696
5	.3314	479	70	.5243	758
10	.3376	488	80	.5718	826
15	.3472	503	90	.6210	897
20	.3581	517	100	.6728	972
25	.3710	536	110	.7257	1049
30	.3842	555	121	.7781	1125

Hydrostatic Gradient Stops:

Recorder Depth Feet	Time	Defl. In.	Pressure PSIG	ΔP PSI	ΔD Feet	ΔP/ΔD PSI/Feet
5446.5		1.7232	2503			

Remarks:

Bottom Hole Pressure Data Sheet

RATHERFORD Field

Well NDC 32-13

Type Tester SCHLUMBERGER WL Number of Test S-4
 Interval Tested _____ To _____ Date of Test 6-6-59
 Point Tested 5449'

Time in Hole 9:40 AM/PM Time on Bottom _____ AM/PM
 Time Open Period Began 10:12 AM/PM Time Open Period Finished 11:42 AM/PM
 Time Off Bottom _____ AM/PM Time Out of Hole 12:15 AM/PM

Length of Open Period From Above 90 MIN Length of Open Period From Pressure Chart 88 MIN

Sample (Air) Chamber Volume 250 CC Recovery _____

Recorder No. HK 13215 Element No. (7769N) Range 3800

Clock No. 3674 Range 3 HR

Open Period:

Depth of Recorder 5457 (Inside/Outside)

Time	Deflect In.	Pressure PSIG			
0	.0093	174	50	.8614	1653
1	.2299	441	60	.8613	1654
5	.3210	616	70	.8620	1654
10	.4928	944	80	.8627	1655
15	.6973	1337	90	.8631	1656
20	.8095	1553			
30	.8542	1639			
40	.8600	1650			

Hydrostatic Gradient Stops:

Recorder Depth Feet	Time	Defl. In.	Pressure PSIG	ΔP PSI	ΔD Feet	ΔP/ΔD PSI/Feet
5455'		1.3132	2520			

Remarks:

Bottom Hole Pressure Data Sheet

RATHERFORD Field
Well NDC 32-13

Type Tester Schlumberger WL Number of Test 3-4
Interval Tested _____ To _____ Date of Test 6-6-59
Point Tested 5449

Time in Hole 9:40 AM/PM Time on Bottom _____ AM/PM
Time Open Period Began 10:12 AM/PM Time Open Period Finished 11:42 AM/PM
Time Off Bottom _____ AM/PM Time Out of Hole 12:15 AM/PM

Length of Open Period From Above 90 MIN Length of Open Period From Pressure Chart 89 MIN

Sample (Air) Chamber Volume 250cc Recovery _____

Recorder No. HK14206 Element No. (2409N) Range 3750

Clock No. 3877 Range 3HR

Open Period:

Depth of Recorder 5457 (Inside/Outside)

Time	Deflect In.	Pressure PSIG			
0	.0043	6	50	.8779	1652
1	.2403	450	60	.8781	1652
5	.3288	615	70	.8784	1652
10	.5043	944	80	.8788	1653
15	.7208	1354	90	.8797	1655
20	.8281	1557			
30	.8720	1640			
40	.8769	1650			

Hydrostatic Gradient Stops:

Recorder Depth Feet	Time	Defl. In.	Pressure PSIG	ΔP PSI	ΔD Feet	ΔP/ΔD PSI/Feet
5455		1.3341	2519			

Remarks:

Bottom Hole Pressure Date Sheet

RATHERFORD Field

Well NDC 32-13

Type Tester SCHLUMBERGER WL Number of Test S-5
 Interval Tested _____ To _____ Date of Test 6-6-59
 Point Tested 5457

Time in Hole 1:10 ~~AM~~/PM Time on Bottom _____ AM/PM
 Time Open Period Began 1:44 ~~AM~~/PM Time Open Period Finished 3:44 ~~AM~~/PM
 Time Off Bottom _____ AM/PM Time Out of Hole 4:09 ~~AM~~/PM

Length of Open Period From Above 120 MIN Length of Open Period From Pressure Chart 118 MIN

Sample (Air) Chamber Volume 250 CC Recovery _____

Recorder No. HK 13215 Element No. (7769N) Range 3800

Clock No. 3674 Range 3 HR

Open Period:

Depth of Recorder 5465 (Inside/Outside)

Time	Deflect In.	Pressure PSIG			
0	.0066	13	50	.6553	1000
1	.2203	424	60	.7584	1455
5	.2262	435	70	.8170	1568
10	.2432	468	80	.8428	1617
15	.2667	513	90	.8540	1639
20	.2991	574	100	.8586	1647
30	.3931	754	110	.8602	1650
40	.5222		120	.8616	1653

Hydrostatic Gradient Stops:

Recorder Depth Feet	Time	Defl. In.	Pressure PSIG	ΔP PSI	ΔD Feet	ΔP/ΔD PSI/Feet
5463		1.3110	2515			

Remarks:

Bottom Hole Pressure Date Sheet

RATHERFORD Field

Well NDC 32-13

Type Tester SCHLUMBERGER WL Number of Test S-5
 Interval Tested _____ To _____ Date of Test 6-6-59
 Point Tested 5457

Time in Hole 1:10 AM/PM Time on Bottom _____ AM/PM
 Time Open Period Began 1:44 AM/PM Time Open Period Finished 3:44 AM/PM
 Time Off Bottom _____ AM/PM Time Out of Hole 4:09 AM/PM

Length of Open Period From Above 120 MIN Length of Open Period From Pressure Chart 118 MIN

Sample (Air) Chamber Volume 250 cc Recovery _____

Recorder No. HK 1020 Element No. (12017N) Range _____

Clock No. 5347 Range 3 HR

Open Period:

Depth of Recorder 5465 (Inside/Outside)

Time	Deflect In.	Pressure PSIG				
0	.0028	4	50	.8790	1272	
1	.2918	421	60	1.0153	1471	
5	.2981	431	70	1.0852	1572	
10	.3203	463	80	1.1167	1618	
15	.3510	507	90	1.1296	1636	
20	.3891	562	100	1.1348	1644	
30	.5186	749	110	1.1377	1648	
40	.6960	1006	120	1.1388	1648	

Hydrostatic Gradient Stops:

Recorder Depth Feet	Time	Defl. In.	Pressure PSIG	ΔP PSI	ΔD Feet	ΔP/ΔD PSI/Feet
5463		1.7282	2511			

Remarks:

Bottom Hole Pressure Date Sheet

RATHERFORD Field
Well NDC 32-13

Type Tester SCHLUMBERGER WL Number of Test S-6
Interval Tested _____ To _____ Date of Test 6-6-59
Point Tested 5465.5

Time in Hole 7:30 AM/PM Time on Bottom _____ AM/PM
Time Open Period Began 7:51 AM/PM Time Open Period Finished 9:57 1/2 AM/PM
Time Off Bottom _____ AM/PM Time Out of Hole 10:10 AM/PM

Length of Open Period From Above 120 MIN Length of Open Period From Pressure Chart 118 MIN

Sample (Air) Chamber Volume 250 CC Recovery _____

Recorder No. HK 1020 Element No. (12017N) Range 2900

Clock No. 5347 Range 3 HR

Open Period:

Depth of Recorder 5473.5 (Inside/Outside)

Time	Deflect In.	Pressure PSIG			
0	.0028	4	100	.4002	578
1	.3782	546	120	.4090	591
5	.3655	528			
10	.3645	527			
20	.3671	530			
40	.3754	542			
60	.3838	554			
80	.3918	565			

Hydrostatic Gradient Stops:

Recorder Depth Feet	Time	Defl. In.	Pressure PSIG	ΔP PSI	ΔD Feet	ΔP/ΔD PSI/Feet
5471.5		1.7293	2512			

Remarks:

Bottom Hole Pressure Date Sheet

RATHERFORD Field
Well NOC 32-13.

Type Tester SCHLUMBERGER WL Number of Test S-6
Interval Tested _____ To _____ Date of Test 6-6-59
Point Tested 5465.5

Time in Hole 7:30 AM/PM Time on Bottom _____ AM/PM
Time Open Period Began 7:51 AM/PM Time Open Period Finished 9:51 1/2 AM/PM
Time Off Bottom _____ AM/PM Time Out of Hole 10:10 AM/PM

Length of Open Period From Above 120 MIN Length of Open Period From Pressure Chart 117 MIN

Sample (Air) Chamber Volume 25000 Recovery _____

Recorder No. HK 13215 Element No. (7769N) Range 3800

Clock No. 3674 Range 3 HR

Open Period:

Depth of Recorder 5473.5 (Inside/Outside)

Time	Deflect In.	Pressure PSIG			
0	.0059	11	100	.3062	588
1	.2907	558	120	.3124	600
5	.2801	538			
10	.2799	538			
20	.2828	543			
40	.2876	552			
60	.2940	565			
80	.3000	576			

Hydrostatic Gradient Stops:

Recorder Depth Feet	Time	Defl. In.	Pressure PSIG	ΔP PSI	ΔD Feet	ΔP/ΔD PSI/Feet
5471.5'		1.3143	2522			

Remarks:

Bottom Hole Pressure Data Sheet

RATHERFORD Field
Well NDC 32-13

Type Tester SCHLUMBERGER W Number of Test S-7
Interval Tested _____ To _____ Date of Test 6-6-59
Point Tested 5469

Time in Hole 11:10 AM/PM Time on Bottom _____ AM/PM
Time Open Period Began 11:42 AM/PM Time Open Period Finished 1:42 AM/PM
Time Off Bottom _____ AM/PM Time Out of Hole 2:05 AM/PM

Length of Open Period From Above 120 MIN Length of Open Period From Pressure Chart 117 MIN

Sample (Air) Chamber Volume 250cc Recovery _____

Recorder No. HK 1020 Element No. (12017N) Range 2900

Clock No. 5347 Range 34R

Open Period:

Depth of Recorder 5477 (Inside/Outside)

Time	Deflect In.	Pressure PSIG			
0	.0085	12	100	.3692	533
1	.3185	460	120	.3862	558
5	.3104	448			
10	.3098	447			
20	.3133	453			
40	.3250	470			
60	.3380	488			
80	.3522	509			

Hydrostatic Gradient Stops:

Recorder Depth Feet	Time	Defl. In.	Pressure PSIG	ΔP PSI	ΔD Feet	ΔP/ΔD PSI/Feet
5475'		1.7302	2514			

Remarks:

Bottom Hole Pressure Date Sheet

RATHERFORD Field

Well INDC 32-13

Type Tester SCHLUMBERGER WL Number of Test S-7
 Interval Tested _____ To _____ Date of Test 6-6-59
 Point Tested 5469

Time in Hole 11:10 AM/PM Time on Bottom _____ AM/PM
 Time Open Period Began 11:42 AM/PM Time Open Period Finished 1:42 AM/PM
 Time Off Bottom _____ AM/PM Time Out of Hole 2:05 AM/PM

Length of Open Period From Above 120 MIN Length of Open Period From Pressure Chart 117 MIN

Sample (Air) Chamber Volume 250cc Recovery _____

Recorder No. HK 13215 Element No. (7769N) Range 3800

Clock No. 3674 Range 3 HR

Open Period:

Depth of Recorder 5477 (Inside/Outside)

Time	Deflect In.	Pressure PSIG			
0	.0085	16	100	.2830	544
1	.2448	471	120	.2967	570
5	.2377	457			
10	.2377	457			
20	.2406	463			
40	.2496	480			
60	.2598	500			
80	.2710	521			

Hydrostatic Gradient Stops:

Recorder Depth Feet	Time	Defl. In.	Pressure PSIG	ΔP PSI	ΔD Feet	ΔP/ΔD PSI/Feet
5475		1.3149	2523			

Remarks:

Bottom Hole Pressure Date Sheet

RATHERFORD Field

Well NDC 32-13

Type Tester SCHLUMBERGER WL Number of Test S-8
 Interval Tested _____ To _____ Date of Test 6-7-59
 Point Tested 5468.5

Time in Hole 2:50 AM/PM Time on Bottom _____ AM/PM
 Time Open Period Began 3:20 1/2 AM/PM Time Open Period Finished 5:20 1/2 AM/PM
 Time Off Bottom _____ AM/PM Time Out of Hole 5:44 AM/PM

Length of Open Period From Above 120 MIN Length of Open Period From Pressure Chart 118 MIN

Sample (Air) Chamber Volume 250 cc Recovery _____

Recorder No. HK 13215 Element No. (7769N) Range _____

Clock No. 3674 Range 3 HR.

Open Period:

Depth of Recorder 5476.5 (Inside/Outside)

Time	Deflect In.	Pressure PSIG			
0	.0099	19	100	.2803	540
1	.2762	531	120	.2843	546
5	.2669	513			
10	.2664	512			
20	.2675	514			
40	.2700	519			
60	.2733	525			
80	.2768	532			

Hydrostatic Gradient Stops:

Recorder Depth Feet	Time	Defl. In.	Pressure PSIG	ΔP PSI	ΔD Feet	ΔP/ΔD PSI/Feet
5474.5'		1.3148	2518			

Remarks:

Bottom Hole Pressure Data Sheet

RATHERFORD Field

Well NDC 32-13

Type Tester SCHLUMBERGER WL Number of Test S-8
 Interval Tested _____ To _____ Date of Test 6-7-59
 Point Tested 5468.5

Time in Hole 2:50 AM/PM Time on Bottom _____ AM/PM
 Time Open Period Began 3:20 1/2 AM/PM Time Open Period Finished 5:20 1/2 AM/PM
 Time Off Bottom _____ AM/PM Time Out of Hole 5:44 AM/PM

Length of Open Period From Above 120 MIN Length of Open Period From Pressure Chart 117 MIN.

Sample (Air) Chamber Volume 250 CC Recovery _____

Recorder No. HK 1020 Element No. (12017N) Range _____

Clock No. 5347 Range 3 HR

Open Period:

Depth of Recorder 5476.5 (Inside/Outside)

Time	Deflect In.	Pressure PSIG			
0	.0049	7	100	.3667	530
1	.3609	521	120	.3723	538
5	.3473	502			
10	.3453	499			
20	.3466	501			
40	.3508	507			
60	.3566	515			
80	.3615	522			

Hydrostatic Gradient Stops:

Recorder Depth Feet	Time	Defl. In.	Pressure PSIG	ΔP PSI	ΔD Feet	ΔP/ΔD PSI/Feet
5474.5'		1.7309	2515			

Remarks:

Bottom Hole Pressure Date Sheet

RATHERFORD Field

Well NDC 32-13

Type Tester SCHLUMBERGER WL Number of Test S-9
 Interval Tested _____ To _____ Date of Test 6-7-59
 Point Tested 5502

Time in Hole 6:20 AM/~~PM~~ Time on Bottom _____ AM/PM
 Time Open Period Began 7:01 AM/~~PM~~ Time Open Period Finished 9:01 AM/~~PM~~
 Time Off Bottom _____ AM/PM Time Out of Hole 9:25 AM/~~PM~~

Length of Open Period From Above 120 MIN Length of Open Period From Pressure Chart 118 MIN

Sample (Air) Chamber Volume 250 CC Recovery _____

Recorder No. HK 13215 Element No. (7769N) Range 3800

Clock No. 3674 Range 3 HR

Open Period:

Depth of Recorder 5510 (Inside/Outside)

Time	Deflect In.	Pressure PSIG			
0	.0079	15	100	.9545	1832
1	.2893	556	120	.9590	1841
5	.3183	611			
10	.3657	702			
20	.4981	954			
40	.8035	1541			
60	.9225	1770			
80	.9469	1817			

Hydrostatic Gradient Stops:

Recorder Depth Feet	Time	Defl. In.	Pressure PSIG	ΔP PSI	ΔD Feet	ΔP/ΔD PSI/Feet
5508		1.3239	2540			

Remarks:

Bottom Hole Pressure Data Sheet

RATHERFORD Field

Well NDC 32-13

Type Tester SCHLUMBERGER WL Number of Test S-9
 Interval Tested _____ To _____ Date of Test 6-7-59
 Point Tested 5502

Time in Hole 6:20 AM/PM Time on Bottom _____ AM/PM
 Time Open Period Began 7:01 AM/PM Time Open Period Finished 9:01 AM/PM
 Time Off Bottom _____ AM/PM Time Out of Hole 9:25 AM/PM

Length of Open Period From Above 120 Length of Open Period From Pressure Chart 118

Sample (Air) Chamber Volume 250 cc Recovery _____

Recorder No. HK 1020 Element No. (12017N) Range 2900

Clock No. 5347 Range 3 HR

Open Period:

Depth of Recorder 5510 (Inside/Outside)

Time	Deflect In.	Pressure PSIG			
0	.0061	9	100	1.2597	1826
1	.3783	546	120	1.2643	1833
5	.4201	607			
10	.4860	702			
20	.6692	967			
40	1.0725	1554			
60	1.2192	1765			
80	1.2489	1810			

Hydrostatic Gradient Stops:

Recorder Depth Feet	Time	Defl. In.	Pressure PSIG	ΔP PSI	ΔD Feet	ΔP/ΔD PSI/Feet
5508		1.7437	2533			

Remarks:

Bottom Hole Pressure Date Sheet

RATHERFORD Field
Well NDC 32-13

Type Tester SCHLUMBERGER WL Number of Test S-10
Interval Tested _____ To _____ Date of Test 6-7-59
Point Tested 5539

Time in Hole 9:45 AM/PM Time on Bottom _____ AM/PM
Time Open Period Began 10:13 AM/PM Time Open Period Finished 11:58 AM/PM
Time Off Bottom _____ AM/PM Time Out of Hole 12:26 AM/PM

Length of Open Period From Above 105 MIN Length of Open Period From Pressure Chart 104 MIN

Sample (Air) Chamber Volume 250 CC Recovery _____

Recorder No. HK 1020 Element No. (12017N) Range 2900

Clock No. 5347 Range 3 HR

Open Period:

Depth of Recorder 5547 (Inside/Outside)

Time	Deflect In.	Pressure PSIG			
0	.0053	8	100	.7417	1073
2	.4929	712	105	.7418	1073
5	.6837	988			
10	.7316	1058			
20	.7399	1070			
40	.7408	1071			
60	.7407	1071			
80	.7415	1072			

Hydrostatic Gradient Stops:

Recorder Depth Feet	Time	Defl. In.	Pressure PSIG	ΔP PSI	ΔD Feet	ΔP/ΔD PSI/Feet
5545		1.7551	2550			

Remarks:

Bottom Hole Pressure Date Sheet

RATHERFORD Field

Well NDC 32-13

Type Tester SCHLUMBERGER WL Number of Test S-10
 Interval Tested _____ To _____ Date of Test 6-7-59
 Point Tested 5539

Time in Hole 9:45 AM/PM Time on Bottom _____ AM/PM
 Time Open Period Began 10:13 AM/PM Time Open Period Finished 11:58 AM/PM
 Time Off Bottom _____ AM/PM Time Out of Hole 12:20 AM/PM

Length of Open Period From Above 105 MIN Length of Open Period From Pressure Chart 103 MIN

Sample (Air) Chamber Volume 250 CC Recovery _____

Recorder No. HK 13215 Element No. 7769N Range _____

Clock No. 3674 Range 3 HR

Open Period:

Depth of Recorder 5547 (Inside/Outside)

Time	Deflect In.	Pressure PSIG			
0	.0056	11	100	.5595	1072
1	.3718	713	105	.5596	1072
5	.5253	1006			
10	.5531	1060			
20	.5591	1072			
40	.5591	1072			
60	.5598	1073			
80	.5590	1071			

Hydrostatic Gradient Stops:

Recorder Depth Feet	Time	Defl. In.	Pressure PSIG	ΔP PSI	ΔD Feet	$\Delta P/\Delta D$ PSI/Feet
5545'		1.3286	2549			

Remarks:

Bottom Hole Pressure Date Sheet

RATHERFORD Field
Well NDC 32-13

Type Tester SCHLUMBERGER WL Number of Test S-11
Interval Tested _____ To _____ Date of Test 6-7-59
Point Tested 556.5

Time in Hole 12:40 AM/PM Time on Bottom _____ AM/PM
Time Open Period Began 1:09.5 AM/PM Time Open Period Finished 3:05.5 AM/PM
Time Off Bottom _____ AM/PM Time Out of Hole 3:30 AM/PM

Length of Open Period From Above 120 MIN Length of Open Period From Pressure Chart 118 MIN

Sample (Air) Chamber Volume 250 CC Recovery _____

Recorder No. HK 1020 Element No. 12017N Range 2900

Clock No. 5347 Range 3 HR

Open Period:

Depth of Recorder 556.5 (Inside/Outside)

Time	Deflect In.	Pressure PSIG			
0	.0040	6	120	.4092	591
1	.3628	524			
10	.3454	499			
20	.3490	504			
40	.3599	520			
60	.3723	538			
80	.3843	555			
100	.3964	573			

Hydrostatic Gradient Stops:

Recorder Depth Feet	Time	Defl. In.	Pressure PSIG	ΔP PSI	ΔD Feet	$\Delta P/\Delta D$ PSI/Feet
5562.5'		1.7592	2556			

Remarks:

Bottom Hole Pressure Date Sheet

RATHERFORD Field

Well NOC 32-13

Type Tester SCHLUMBERGER WL Number of Test S-11
 Interval Tested _____ To _____ Date of Test 6-7-59
 Point Tested 5556.5'

Time in Hole 12:40 AM/PM Time on Bottom _____ AM/PM
 Time Open Period Began 1:09.5 AM/PM Time Open Period Finished 3:09.5 AM/PM
 Time Off Bottom _____ AM/PM Time Out of Hole 3:30 AM/PM

Length of Open Period From Above 120 MIN Length of Open Period From Pressure Chart 118 MIN

Sample (Air) Chamber Volume 250 cc Recovery _____

Recorder No. HK 13215 Element No. (7769N) Range 3800

Clock No. 3674 Range 3HR

Open Period:

Depth of Recorder 5564.5 (Inside/Outside)

Time	Deflect In.	Pressure PSIG			
0	.0040	8	120	.3097	595
1	.2699	519			
10	.2612	502			
20	.2639	507			
40	.2720	523			
60	.2807	539			
80	.2908	559			
100	.3003	577			

Hydrostatic Gradient Stops:

Recorder Depth Feet	Time	Defl. In.	Pressure PSIG	ΔP PSI	ΔD Feet	ΔP/ΔD PSI/Feet
5562.5		1.331	12558			

Remarks:

Bottom Hole Pressure Date Sheet

RATHERFORD Field

Well NDC 32-13

Type Tester SCHLUMBERGER WL Number of Test S-12
 Interval Tested _____ To _____ Date of Test 6-7-59
 Point Tested 5440

Time in Hole 4:15 AM/PM Time on Bottom _____ AM/PM
 Time Open Period Began 4:38.5 AM/PM Time Open Period Finished 9:38.5 AM/PM
 Time Off Bottom _____ AM/PM Time Out of Hole _____ AM/PM

Length of Open Period From Above 300 MIN Length of Open Period From Pressure Chart 295

Sample (Air) Chamber Volume 200 cc Recovery _____

Recorder No. HK 13215 Element No. (7769) Range 3800

Clock No. 2145 Range 12 HR

Open Period:

Depth of Recorder 5448 (Inside/Outside)

Time	Deflect In.	Pressure PSIG			
0	.0079	15	100	.5879	1127
5	.2898	557	120	.6662	1277
10	.2940	565	140	.7326	1405
20	.3109	597	180	.8074	1549
30	.3336	640	220	.8411	1614
40	.3584	687	260	.8549	1640
60	.4238	812	300	.8609	1652
80	.5034	969			

Hydrostatic Gradient Stops:

Recorder Depth Feet	Time	Defl. In.	Pressure PSIG	ΔP PSI	ΔD Feet	ΔP/ΔD PSI/Feet
5446		1.3051	2504			
5146		1.2369	2373			
5246		1.2610	2419			
5346		1.2849	2465			

Remarks:

Bottom Hole Pressure Date Sheet

RATHELFORD Field
Well NDC 32-13

Type Tester SCHLUMBERGER WL Number of Test S-12
Interval Tested _____ To _____ Date of Test 6-7-59
Point Tested 5440

Time in Hole 9:15 AM/PM Time on Bottom _____ AM/PM
Time Open Period Began 4:38.5 AM/PM Time Open Period Finished 9:38.5 AM/PM
Time Off Bottom _____ AM/PM Time Out of Hole _____ AM/PM

Length of Open Period From Above 300 MIN Length of Open Period From Pressure Chart 292 MIN

Sample (Air) Chamber Volume 200 cc Recovery _____

Recorder No. HK 1020 Element No. (12017N) Range 2900

Clock No. 3074 Range 12 HR

Open Period:

Depth of Recorder 5448 (Inside/Outside)

Time	Deflect In.	Pressure PSIG			
0	.0050	7	100	.8049	1164
5	.3809	550	120	.9056	1311
10	.3891	562	140	.9828	1424
20	.4136	597	180	1.0738	1556
30	.4483	647	220	1.1136	1613
40	.4913	710	260	1.1302	1637
60	.5870	848	300	1.1361	1646
80	.6982	1009			

Hydrostatic Gradient Stops:

Recorder Depth Feet	Time	Defl. In.	Pressure PSIG	ΔP PSI	ΔD Feet	$\Delta P/\Delta D$ PSI/Feet
5446		1.7182	2496			
5146		1.6299	2366			
5246		1.6628	2414			
5346		1.6932	2459			

Remarks:

Bottom Hole Pressure Data Sheet

Field RATHERFORD

Well NDC 32-13

Type Tester B&O Number of Test B-13
 Interval Tested 5497.5 To 5509.5 Date of Test 6-9-59

Main (Hydraulic) Valve opened _____ AM/PM Shut-in Pressure Valve Closed
 After 15 seconds
 Trip (Top) Valve opened 2:58 AM/PM Tool Shut in 3:58 AM/PM
 Packers Pulled 8:05 AM/PM GTS _____ Minutes
 Blow DEAD UNTIL T=45MIN. FAINT BLOW TO END OF FLOW PERIOD
 Recovery 15-50' (0.1-0.2 BRLS) PROBABLE SLIGHTLY OIL CUT OIL BASE MUD

	From Above	From Pressure Chart
Length of Initial Shut-in	244	233
Length of Flow Period	60	60
Length of Final Shut-in	247	242

Recorder No. HK 1020 Element No. 12017N Range 2900
 Clock No. 5245 Range 24 HR
 Depth of Recorder 5518 Inside/Outside

Initial Shut-In Pressure Readings:

Time	Deflect In.	Pressure PSIG			
0	.0149	21	140	1.2449	1803
5	.0889	128	160	1.2461	1806
10	.5192	750	170	1.2466	1807
20	1.0907	1580	180	1.2470	1807
30	1.1853	1717	190	1.2470	1807
40	1.2128	1757	200	1.2476	1808
60	1.2330	1787	210	1.2479	1808
80	1.2385	1795	220	1.2480	1809
100	1.2420	1800	230	1.2481	1809
120	1.2437	1802	240	1.2485	1809
			244	1.2489	1810

Flow Period Pressure Readings:

Time	Deflect In.	Pressure PSIG			
0	.0169	24	50	.0173	25
5	.0164	24	60	.0178	25
10	.0161	23			
20	.0161	23			
30	.0168	24			
40	.0167	24			

Field RATHERFORDWell NDC 32-13Test No. B-13 Recorder No. HK 1020Final Shut-In Pressure Readings:

Time	Deflect In	Pressure PSIG			
0	.0178	75	230	1.2012	1740
5	.0376	54	240	1.2037	1744
10	.0509	73	247	1.2064	1748
20	.0714	103			
30	.1001	144			
40	.1319	190			
60	.2212	319			
80	.3898	563			
100	.7143	1033			
120	.9982	1446			
140	1.1159	1616			
160	1.1619	1683			
170	1.1718	1698			
180	1.1794	1709			
190	1.1857	1718			
200	1.1909	1725			
210	1.1961	1733			
220	1.1981	1736			

Hydrostatic Pressures

	Time	Depth Ft.	Deflection In.	Pressure PSIG	
Initial			1.7454	2536	
Final	NOT READABLE				

Remarks:

Bottom Hole Pressure Data Sheet

Field RATHERFORD

Well NDC 32-13

Type Tester B 90 Number of Test B-13
 Interval Tested 5497.5 To 5509.5 Date of Test 6-9-59

Main (Hydraulic) Valve opened _____ AM/PM Shut-in Pressure Valve Closed
 After 15 seconds
 Trip (Top) Valve opened 2:53 AM/PM Tool Shut in 3:53 AM/PM
 Packers Pulled 3105 AM/PM GTS _____ Minutes
 Blow DEAD UNTIL t=45 MIN FAIN T BLOW TO END OF FLOW PERIOD
 Recovery 15-50' (0.1-0.2 BRLS) PROBABLE SLIGHTLY OIL CUT OIL BASE MUD

	From Above	From Pressure Chart
Length of Initial Shut-in	244	~ 240
Length of Flow Period	60	~ 65
Length of Final Shut-in	247	~ 249

Recorder No. AK-1 #1051 Element No. 2430 N Range _____
 Clock No. 4964 Range _____
 Depth of Recorder 5504.5 Inside/Outside

Initial Shut-In Pressure Readings:

Time	Deflect In.	Pressure PSIG			
0	0.0252	119	140	2.3258	1803
5	0.0326	25	160	2.3288	1805
10	0.0452	34	170	2.3303	1806
20	1.9848	1528	180	2.3312	1807
30	2.2386	1733	190	2.3320	1808
40	2.2799	1766	200	2.3327	1808
60	2.3060	1787	210	2.3330	1808
80	2.3159	1795	220	2.3334	1809
100	2.3216	1799	230	2.3339	1809
120	2.3247	1802	240	2.3344	1810
			244	1.5261	1174

Flow Period Pressure Readings:

Time	Deflect In.	Pressure PSIG			
0	0.0283	22	50	0.0312	24
5	0.0286	22	60	0.0321	24
10	0.0282	22			
20	0.0288	22			
30	0.0297	23			
40	0.0306				

Field RATHERFORDWell NDC 32-13Test No. B-13 Recorder No. AK-1 #1051Final Shut-In Pressure Readings:

Time	Deflect In	Pressure PSIG				
0	0.0325	25	230	2.2508	1743	
5	0.0565	43	240	2.2563	1747	
10	0.0741	57	247	2.2607	1751	
20	0.1279	98				
30	0.1767	136				
40	0.2417	186				
60	0.3906	300				
80	0.7182	552				
100	1.2538	964				
120	1.8756	1447				
140	2.0899	1616				
160	2.1680	1677				
170	2.1914	1696				
180	2.2088	1710				
190	2.2224	1720				
200	2.2319	1728				
210	2.2391	1733				
220	2.2442	1737				

Hydrostatic Pressures

	Time	Depth Ft.	Deflection In.	Pressure PSIG		
Initial			3.2538	2547		
Final	NOT READABLE					

Remarks:

Bottom Hole Pressure Data Sheet

Field RATHERFORD

Well NDC 32-13

Type Tester B & O Number of Test B-13
 Interval Tested 5497.5 To 5507.5 Date of Test 6-9-59

Main (Hydraulic) Valve opened _____ AM/PM Shut-in Pressure Valve Closed
 After 15 seconds
 Trip (Top) Valve opened 2:58 AM/PM Tool Shut in 3:58 AM/PM
 Packers Pulled 8:05 AM/PM GTS _____ Minutes
 Blow DEAD UNTIL T=45 MIN. FAINT BLOW TO END OF FLOW PERIOD
 Recovery 15-50' (0.1-0.2 BBLs.) PROBABLE SLIGHTY OIL CUT OIL BASE MUD

	From Above	From Pressure Chart
Length of Initial Shut-in	<u>244 MIN</u>	<u>245</u>
Length of Flow Period	<u>60</u>	<u>58</u>
Length of Final Shut-in	<u>247</u>	<u>248</u>

Recorder No. HK 13215 Element No. 7769N Range 3800
 Clock No. 5412 Range 24HR
 Depth of Recorder 5524.5 Inside/Outside

Initial Shut-In Pressure Readings:

Time	Deflect In.	Pressure PSIG			
0	.0148	29	140	.9461	1816
5	.0238	46	160	.9468	1817
10	.0668	129	170	.9477	1819
20	.6542	1254	180	.9480	1819
30	.8634	1657	190	.9481	1820
40	.9101	1746	200	.9482	1820
60	.9339	1792	210	.9482	1820
80	.9406	1805	220	.9483	1820
100	.9432	1810	230	.9490	1821
120	.9450	1814	240	.9490	1821
			244	.9497	1823

Flow Period Pressure Readings:

Time	Deflect In.	Pressure PSIG			
0	.0178	34	50	.0181	35
5	.0171	33	60	.0183	35
10	.0170	33			
20	.0169	32			
30	.0172	33			
40	.0178	34			

Field RATHERFORDWell NDC 32-13Test No. 8-13 Recorder No. HK 13215Final Shut-In Pressure Readings:

Time	Deflect In	Pressure PSIG			
0	.0183	35	230	.9128	1752
5	.0252	49	240	.9156	1757
10	.0352	68	247	.9171	1760
20	.0550	106			
30	.0768	147			
40	.1023	197			
60	.1552	299			
80	.2671	513			
100	.5006	959			
120	.7197	1380			
140	.8310	1594			
160	.8749	1679			
170	.8849	1628			
180	.8914	1710			
190	.8975	1722			
200	.9023	1730			
210	.9068	1740			
220	.9074	1741			

Hydrostatic Pressures

	Time	Depth Ft.	Deflection In.	Pressure PSIG	
Initial			1.3301	2552	
Final	NOT READABLE				

Remarks;

Bottom Hole Pressure Data Sheet

Field RATHERFORD

Well NDC 32-13

Type Tester BFO Number of Test B-14 A
 Interval Tested 5461 To 5473 Date of Test 6-12-59

Main (Hydraulic) Valve opened 5:09 AM Shut-in Pressure Valve Closed
 After 20 seconds

Trip (Top) Valve opened 9:11 AM Tool Shut in 10:11 AM
 Packers Pulled 2:11 AM GTS _____ Minutes

Blow MODERATE FLOW IMMEDIATELY TO END OF TEST

Recovery 60' OIL BASE MUD & GAS CUT FORMATION OIL

	From Above	From Pressure Chart
Length of Initial Shut-in	242	245
Length of Flow Period	60	63
Length of Final Shut-in	240	250

Recorder No. AK-1 # 1050 Element No. 2457 N Range _____
 Clock No. 4963 Range _____
 Depth of Recorder 5452.5 Inside/Outside

Initial Shut-In Pressure Readings:

Time	Deflect In.	Pressure PSIG			
0	0.1433	121	140	1.9316	1618
5	0.3220	268	160	1.9367	1622
10	0.4176	348	170	1.9385	1624
20	0.7678	640	180	1.9393	1624
30	1.1328	946	190	1.9413	1626
40	1.5792	1321	200	1.9420	1627
60	1.8216	1525	210	1.9432	1628
80	1.8892	1582	220	1.9441	1628
100	1.9110	1600	230	1.9445	1629
120	1.9248	1612	240	1.9450	1629
			242	1.9450	1629

Flow Period Pressure Readings:

Time	Deflect In.	Pressure PSIG			
0	0.0228	19	50	0.0331	28
5	0.0278	23	60	0.0335	28
10	0.0283	23			
20	0.0313	26			
30	0.0324	27			
40	0.0328	28			

Field RATHERFORD

Well NDC 32-13

Test No. 3-14 A Recorder No. AK-1 #1050

Final Shut-In Pressure Readings:

Time	Deflect In	Pressure PSIG				
0	0.0339	28	230	1.9073	1597	
5	0.0920	76	240	1.9089	1599	
10	0.1938	161				
20	0.3699	304				
30	0.6393	533				
40	0.9645	805				
60	1.5723	1314				
80	1.7577	1471				
100	1.8189	1523				
120	1.8490	1548				
140	1.8696	1566				
160	1.8821	1576				
170	1.8876	1583				
180	1.8909	1584				
190	1.8952	1587				
200	1.8992	1590				
210	1.9021	1593				
220	1.9048	1595				

Hydrostatic Pressures

	Time	Depth Ft.	Deflection In.	Pressure PSIG		
Initial			2.9676	2501		
Final	NOT	READABLE				

Remarks:

Bottom Hole Pressure Data Sheet

Field RATHERFORD

Well NDC 32-13

Type Tester B&O Number of Test B-14A
 Interval Tested 5461 To 5473 Date of Test 6-12-59

Main (Hydraulic) Valve opened 5:09 AM/PM Shut-in Pressure Valve Closed
 After 20 seconds
 Trip (Top) Valve opened _____ AM/PM Tool Shut in _____ AM/PM
 Packers Pulled _____ AM/PM GTS _____ Minutes
 Blow MODERATE BLOW IMMEDIATELY TO END OF TEST
 Recovery 60' OIL-BASE MUD & GAS CUT FORMATION OIL

	From Above	From Pressure Chart
Length of Initial Shut-in	242	242
Length of Flow Period	60	60
Length of Final Shut-in	240	242

Recorder No. HK 13215 Element No. (7769N) Range 3800
 Clock No. 5412 Range 24 HR
 Depth of Recorder 5486.5 Inside/Outside

Initial Shut-In Pressure Readings:

Time	Deflect In.	Pressure PSIG			
0	—	—	140	.8578	1646
5	.1028	198	160	.8602	1650
10	.1436	276	170	.8619	1654
20	.2409	394	180	.8625	1655
30	.3437	660	190	.8632	1656
40	.4734	907	200	.8641	1658
60	.7518	1442	210	.8642	1658
80	.8252	1583	220	.8648	1659
100	.8444	1620	230	.8652	1660
120	.8531	1637	240	.8654	1660
			242	.8654	1660

Flow Period Pressure Readings:

Time	Deflect In.	Pressure PSIG			
0	.0160	31	50	.0210	41
5	.0184	35	60	.0219	42
10	.0190	37			
20	.0208	40			
30	.0207	40			
40	.0209	40			

Field RATHERFORDWell NDC 32-13Test No. B-14A Recorder No. 13215Final Shut-In Pressure Readings:

Time	Deflect In	Pressure PSIG				
0	.0219	42	230	.8481	1627	
5	.0607	117	240	.8491	1629	
10	.1063	205				
20	.1488	286				
30	.2233	429				
40	.3124	600				
60	.5389	1033				
80	.7234	1387				
100	.7908	1517				
120	.8143	1562				
140	.8270	1587				
160	.8348	1602				
170	.8380	1608				
180	.8406	1613				
190	.8421	1616				
200	.8442	1620				
210	.8462	1624				
220	.8469	1625				

Hydrostatic Pressures

	Time	Depth Ft.	Deflection In.	Pressure PSIG		
Initial	NOT READABLE					
Final	✓	✓				

Remarks:

Bottom Hole Pressure Data Sheet

Field RATHERFORD

Well NDC 32-13

Type Tester B E O Number of Test B-15
 Interval Tested 5438 To 5462 Date of Test 6-10-59

Main (Hydraulic) Valve opened _____ AM/PM Shut-in Pressure Valve Closed
 After 20 seconds
 Trip (Top) Valve opened 12:09 AM/PM Tool Shut in 1:09 AM/PM
 Packers Pulled 5:11 AM/PM GTS _____ Minutes
 Blow FAINT BLOW IN TWO MIN., WEAK BLOW IN 8 MIN TO END OF OPEN PERIOD
 Recovery 180' (9 BBLs) OBM, E G C FORM O.

	From Above	From Pressure Chart
Length of Initial Shut-in	<u>240 MIN</u>	<u>236</u>
Length of Flow Period	<u>60 MIN</u>	<u>58</u>
Length of Final Shut-in	<u>242 MIN</u>	<u>239</u>

Recorder No. HK 1020 Element No. # 12017N Range 2900
 Clock No. 5245 Range 24 HR
 Depth of Recorder 5471 Inside/Outside

Initial Shut-In Pressure Readings:

Time	Deflect In.	Pressure PSIG			
0	—	—	140	1.1340	1643
5	1.0580	1533	160	1.1346	1644
10	1.1091	1607	170	1.1346	1644
20	1.1210	1624	180	1.1346	1644
30	1.1256	1631	190	1.1346	1644
40	1.1282	1634	200	1.1351	1644
60	1.1317	1639	210	1.1349	1644
80	1.1327	1641	220	1.1350	1644
100	1.1333	1642	230	1.1352	1644
120	1.1337	1642	240	1.1351	1644

Flow Period Pressure Readings:

Time	Deflect In.	Pressure PSIG			
0	.0281	40	50	.0458	66
5	.0300	43	60	.0474	68
10	.0332	48			
20	.0396	57			
30	.0428	62			
40	.0443	64			

Field RATHERFORDWell NDC 32-13Test No. B-15 Recorder No. 1020Final Shut-In Pressure Readings:

Time	Deflect In	Pressure PSIG				
0	.0474	68	230	1.1031	1598	
5	.1946	280	240	1.1045	1600	
10	.3084	445				
20	.5398	780				
30	.7930	1147				
40	.9269	1342				
60	1.0010	1450				
80	1.0456	1515				
100	1.0678	1547				
120	1.0786	1563				
140	1.0873	1575				
160	1.0932	1584				
176	1.0958	1587				
180	1.0974	1590				
190	1.0996	1593				
200	1.1013	1595				
210	1.1024	1597				
220	1.1022	1597				

Hydrostatic Pressures

	Time	Depth Ft.	Deflection In.	Pressure PSIG		
Initial	NOT READABLE					
Final	NOT READABLE					

Remarks:

Bottom Hole Pressure Data Sheet

Field RATHERFORD

Well NDC 32-12

Type Tester BFO Number of Test B-15
 Interval Tested 5438 To 5462 Date of Test 6-10-59

Main (Hydraulic) Valve opened 8:09 AM/PM Shut-in Pressure Valve Closed
 After 20 seconds

Trip (Top) Valve opened 12:09 AM/PM Tool Shut in 1:09 AM/PM

Packers Pulled 5:11 AM/PM GTS _____ Minutes

Blow FAINT BLOW IN TRIP MIN., WEAK BLOW IN 8 MIN TO END OF OPEN PERIOD

Recovery 180' (1.9 BLS) GPM @ GC FORM D

	From Above	From Pressure Chart
Length of Initial Shut-in	240 MIN	240
Length of Flow Period	60	60
Length of Final Shut-in	242	247

Recorder No. 1050 Element No. 2957N Range _____
 Clock No. 4963 Range _____
 Depth of Recorder 5427.5 Inside/Outside

Initial Shut-In Pressure Readings:

Time	Deflect In.	Pressure PSIG			
0	—	—	140	1.9371	1622
5	1.8926	1585	160	1.9379	1623
10	1.9176	1593	170	1.9382	1623
20	1.9260	1613	180	1.9383	1623
30	1.9310	1617	190	1.9383	1623
40	1.9332	1619	200	1.9383	1623
60	1.9352	1621	210	1.9383	1623
80	1.9360	1621	220	1.9385	1624
100	1.9366	1622	230	1.9389	1624
120	1.9368	1622	240	1.9391	1624

Flow Period Pressure Readings:

Time	Deflect In.	Pressure PSIG			
0	0.0170	14	50	0.0658	54
5	0.0317	26	60	0.0687	57
10	0.0393	33			
20	0.0506	42			
30	0.0573	48			
40	0.0626	52			

Field RATHERFORDWell NDC 32-13Test No. B-15 Recorder No. 1050Final Shut-In Pressure Readings:

Time	Deflect In	Pressure PSIG				
0	0.0687	57	230	1.8840	1578	
5	0.3340	278	240	1.8864	1580	
10	0.5367	498	247	1.8870	1580	
20	1.1196	935				
30	1.5614	1304				
40	1.6586	1387				
60	1.7410	1457				
80	1.7866	1495				
100	1.8187	1522				
120	1.8358	1537				
140	1.8498	1549				
160	1.8599	1557				
170	1.8646	1561				
180	1.8692	1565				
190	1.8730	1568				
200	1.8758	1571				
210	1.8788	1573				
220	1.8812	1575				

Hydrostatic Pressures

	Time	Depth Ft.	Deflection In.	Pressure PSIG		
Initial			2.9680	2502		
Final			2.9605	2495		

Remarks:

Bottom Hole Pressure Data Sheet

Field RATHERFORD

Well NDC 32-13

Type Tester B-0 Number of Test B-15
 Interval Tested 5438 To 5462 Date of Test 6-10-59

Main (Hydraulic) Valve opened _____ AM/PM Shut-in Pressure Valve Closed
 After 20 seconds
 Trip (Top) Valve opened 12:09 AM/PM Tool Shut in 1:09 AM/PM
 Packers Pulled 5:11 AM/PM GTS _____ Minutes
 Blow FAINT BLOW IN TWO MIN. WEAK BLOW IN 8 MIN TO END OF OPEN PERIOD
 Recovery 180' (.9 BGLS) OBM 6C FORM O.

	From Above	From Pressure Chart
Length of Initial Shut-in	<u>240 MIN</u>	<u>245</u>
Length of Flow Period	<u>60</u>	<u>58</u>
Length of Final Shut-in	<u>242</u>	<u>248</u>

Recorder No. #K 13215 Element No. 7769N Range 3800
 Clock No. 5412 Range 24 HR
 Depth of Recorder 5477.5 Inside/Outside

Initial Shut-In Pressure Readings:

Time	Deflect In.	Pressure PSIG			
0	—	—	140	.8592	1649
5	.4559	874	160	.8593	1649
10	.7749	1486	170	.8594	1649
20	.8428	1617	180	.8595	1649
30	.8501	1631	190	.8597	1650
40	.8532	1637	200	.8600	1650
60	.8567	1644	210	.8600	1650
80	.8578	1646	220	.8600	1650
100	.8585	1647	230	.8597	1650
120	.8590	1648	240	.8593	1649

Flow Period Pressure Readings:

Time	Deflect In.	Pressure PSIG			
0	.0211	41	50	.0365	70
5	.0254	49	60	.0380	73
10	.0271	52			
20	.0315	61			
30	.0347	67			
40	.0357	69			

Field RATHERFORDWell NDC 32-13Test No. B-15 Recorder No. 13215Final Shut-In Pressure Readings:

Time	Deflect In	Pressure PSIG				
0	.0380	73	230	.8352	1602	
5	.0957	185	240	.8366	1605	
10	.2112	406				
20	.3351	643				
30	.5272	1010				
40	.6878	1319				
60	.7547	1448				
80	.7811	1498				
100	.8008	1536				
120	.8109	1556				
140	.8178	1569				
160	.8234	1580				
170	.8260	1585				
180	.8271	1587				
190	.8296	1592				
200	.8313	1595				
210	.8327	1598				
220	.8342	1601				

Hydrostatic Pressures

	Time	Depth Ft.	Deflection In.	Pressure PSIG		
Initial						
Final						

Remarks:

Bottom Hole Pressure Data Sheet

Field RATHERFORD

Well NDC 32-13

Type Tester BFO Number of Test B-15
 Interval Tested 5438 To 5462 Date of Test 6-10-59

Main (Hydraulic) Valve opened 9:09 AM/PM Shut-in Pressure Valve Closed
 After 20 seconds
 Trip (Top) Valve opened 12:09 AM/PM Tool Shut in 1:09 AM/PM
 Packers Pulled 511 AM/PM GTS _____ Minutes
 Blow FAINT BLOW IN TWO MIN. WEAK BLOW IN 8 MIN TO END OF OPEN PERIOD
 Recovery 180' (9 BBL) CBM & GC FROM O.

	From Above	From Pressure Chart
Length of Initial Shut-in	240 MIN	240
Length of Flow Period	60	60
Length of Final Shut-in	242	245

Recorder No. 1051 Element No. 2430 N Range _____
 Clock No. 4964 Range _____
 Depth of Recorder 5457 Inside/Outside

Initial Shut-In Pressure Readings:

Time	Deflect In.	Pressure PSIG			
0	—	—	140	2.1126	1633
5	2.0763	1605	160	2.1131	1634
10	2.0858	1612	170	2.1139	1635
20	2.0953	1620	180	2.1140	1635
30	2.1018	1625	190	2.1142	1635
40	2.1047	1627	200	2.1145	1635
60	2.1081	1630	210	2.1147	1635
80	2.1096	1631	220	2.1148	1635
100	2.1107	1632	230	2.1150	1635
120	2.1118	1633	240	2.1150	1635

Flow Period Pressure Readings:

Time	Deflect In.	Pressure PSIG			
0	0.0339	26	50	0.0760	58
5	0.0456	35	60	0.0792	61
10	0.0502	38			
20	0.0627	40			
30	0.0697	53			
40	0.0734	56			

Field RATHERFORDWell NDC 32-13Test No. B-15 Recorder No. 1051Final Shut-In Pressure Readings:

Time	Deflect In	Pressure PSIG				
0	0.0792	61	230	2.0556	1588	
5	0.3042	234	240	2.0587	1591	
10	0.5681	437	~245	2.0595	1592	
20	1.1994	922				
30	1.6826	1296				
40	1.7956	1384				
60	1.8990	1465				
80	1.9580	1511				
100	1.9880	1535				
120	2.0067	1550				
140	2.0204	1561				
160	2.0308	1569				
170	2.0368	1574				
180	2.0403	1576				
190	2.0431	1579				
200	2.0473	1582				
210	2.0500	1584				
220	2.0530	1586				

Hydrostatic Pressures

	Time	Depth Ft.	Deflection In.	Pressure PSIG		
<u>Initial</u>			3.2086	2510		
<u>Final</u>			3.1995	2503		

Remarks:

Bottom Hole Pressure Data Sheet

Field RATHERFORD

Well NDC 32-13

Type Tester B&O Number of Test B-16
 Interval Tested 5428 To 5438.5 Date of Test 6-11-59

Main (Hydraulic) Valve opened 1:23 AM/PM Shut-in Pressure Valve Closed
 After 15 seconds

Trip (Top) Valve opened 5:26 AM/PM Tool Shut in 6:26 AM/PM
 Packers Pulled 10:26 AM/PM GTS 12 Minutes

Blow WEAK BLOW IN 1 MIN MODERATE BLOW IN 29 MIN TO END OF FLOW PERIOD
 Recovery 425' (3.6 BBLs) ORM & GC FORM. O

	From Above	From Pressure Chart
Length of Initial Shut-in	243	
Length of Flow Period	60	
Length of Final Shut-in	240	

Recorder No. AKI 1050 Element No. 2457N Range 3400
 Clock No. 4963 Range 24 HR
 Depth of Recorder 5419 Inside/Outside

Initial Shut-In Pressure Readings:

Time	Deflect In.	Pressure PSIG			
0	—	—	140	1.8973	1589
5	1.8006	1507	160	1.8976	1589
10	1.8239	1527	170	1.8980	1590
20	1.8600	1557	180	1.8982	1590
30	1.8739	1569	190	1.8982	1590
40	1.8801	1574	200	1.8984	1590
60	1.8882	1581	210	1.8989	1590
80	1.8933	1586	220	1.8988	1590
100	1.8960	1588	230	1.8989	1590
120	1.8971	1589	243	1.8990	1590

Flow Period Pressure Readings:

Time	Deflect In.	Pressure PSIG			
0	.0670	56	50	.1258	104
5	.0782	65	60	.1381	115
10	.0859	71			
20	.1140	95			
30	.1069	89			
40	.1109	92			

Field RATHERFORDWell NDC 32-13Test No. B-16 Recorder No. AK1 1050Final Shut-In Pressure Readings:

Time	Deflect In	Pressure PSIG			
0	.1381	115	230	1,8577	1555
5	1.2331	1029	240	1.8610	1558
10	1.3662	1141			
20	1.4961	1250			
30	1.5522	1297			
40	1.6148	1350			
60	1.6947	1418			
80	1.7444	1460			
100	1.7812	1491			
120	1.8039	1510			
140	1.8209	1524			
160	1.8321	1534			
170	1.8381	1539			
180	1.8415	1542			
190	1.8463	1546			
200	1.8492	1548			
210	1.8530	1552			
220	1.8550	1553			

Hydrostatic Pressures

	Time	Depth Ft.	Deflection In.	Pressure PSIG	
Initial			2.9579	2493	
Final			2.9663	2500	

Remarks:

Bottom Hole Pressure Data Sheet

Field RATHERFORD

Well NDC 32-13

Type Tester BFO Number of Test B-16
 Interval Tested 5428 To 5438.5 Date of Test 6-11-59

Main (Hydraulic) Valve opened 1:23 AM/~~PM~~ Shut-in Pressure Valve Closed
 After 15 seconds
 Trip (Top) Valve opened 5:26 AM/~~PM~~ Tool Shut in 6:26 AM/~~PM~~
 Packers Pulled 10:26 AM/~~PM~~ GTS 12 Minutes
 Blow WEAK BLOW IN 1 MIN, MODERATE BLOW IN 29 MIN TO END OF FLOW PERIOD
 Recovery 425' (3.6 BBL.S) O&M 9C FORM. 0

	From Above	From Pressure Chart
Length of Initial Shut-in	<u>243</u>	<u>240</u>
Length of Flow Period	<u>60</u>	<u>60</u>
Length of Final Shut-in	<u>240</u>	<u>240</u>

Recorder No. AK-1²1051 Element No. 2430 N Range _____
 Clock No. 4964 Range _____
 Depth of Recorder 5432 Inside/~~Outside~~

Initial Shut-In Pressure Readings:

Time	Deflect In.	Pressure PSIG			
0	—	—	140	2.0546	1588
5	1.9811	1529	160	2.0553	1588
10	2.0002	1546	170	2.0559	1589
20	2.0241	1564	180	2.0563	1589
30	2.0346	1572	190	2.0565	1589
40	2.0400	1576	200	2.0568	1589
60	2.0471	1582	210	2.0571	1590
80	2.0503	1584	220	2.0574	1590
100	2.0522	1586	230	2.0582	1591
120	2.0537	1587	240	2.0582	1591

Flow Period Pressure Readings:

Time	Deflect In.	Pressure PSIG			
0	0.0808	62	50	0.1357	104
5	0.0967	74	60	0.1474	113
10	0.1120	86			
20	0.1199	92			
30	0.1182	90			
40	0.1250	95			

Field RATHERFORDWell NDC 32-13Test No. B-16 Recorder No. AK-1 1051Final Shut-In Pressure Readings:

Time	Deflect In	Pressure PSIG			
0	0.1474	113	230	2.0213	1561
5	1.2179	936	240	2.0243	1564
10	1.4345	1103			
20	1.5784	1215			
30	1.6765	1291			
40	1.7569	1354			
60	1.8378	1417			
80	1.8980	1464			
100	1.9328	1491			
120	1.9598	1513			
140	1.9767	1526			
160	1.9914	1537			
170	1.9989	1544			
180	2.0036	1547			
190	2.0091	1551			
200	2.0133	1555			
210	2.0157	1557			
220	2.0188	1559			

Hydrostatic Pressures

	Time	Depth Ft.	Deflection In.	Pressure PSIG	
Initial			3.1926	2497	
Final			3.1910	2496	

Remarks:

SHELL OIL COMPANY
DAILY OPERATIONS REPORT

Well: North Desert Creek 32-13

Date: 5-27-59
to
5-28-59 AM

Depth: 5370'

Drilled: 112'

Cored:

Other Operations:

Location: 1881' S and 1979' W of NE Corner, Section 13,
T41S, R23E, San Juan County, Utah.

Elevations: DF 4650.5'
GR 4638.5'
KB 4652.0'

Preliminary Data Determinations:

Remarks:

72

SHELL OIL COMPANY
DAILY OPERATIONS REPORT

Well: North Desert Creek 32-13

Date: 5-31-59
to
6-5-59 A.M.

Depth:

Drilled:

Cored:

Other Operations:

Cut Core #1, 2, 3 and 4

Preliminary Data Determinations:

- Core #1 5423-73, Recovered 49.75'
36' Limestone I-III VF-LB₁₋₅+C₁₋₁₂+D₁₋₃ dolomitic in part.
14' Limestone, I/II A-B₂ with black shale partings and chert nodules.
- Core #2 5473-5523, Recovered 50'
14' Limestone, I/III VFA
6' Dolomite, I/IIIA
3' Limestone, IVFA
12' Dolomite, I, II, III VFAB_{T2-5} + C₁₋₂
11' Limestone, I/III VFA+C₃
4' Dolomite, IIVFA
- Core #3 5523-74', Recovered 51'.
8' Limestone IVFA
23' Limestone I/III B_{tr-4} C_{tr-6} D₁₋₃
13' Dolomite III VFA,
7' Dolomite III VFB₂₋₄ C_{tr-2}
- Core #4 5574-89', Recovered 15'
4' Dolomite III/II VFA
11' Shale

SHELL OIL COMPANY
DAILY OPERATIONS REPORT

Well: North Desert Creek 32-13

Date: 6-5-59
to
6-6-59 A.M.

Depth: 5588'

Drilled: \emptyset

Cored: \emptyset

Other Operations: Ran Gamma Ray-Neutron log, Microcaliper log and Induction-Electrical survey.
Ran Schlumberger Wire Line Tests S-1, S-2, S-3, S-3A, S-4, S-5, S-6, S-7.

Preliminary Data Determinations:

WLT S-1 @ 5432', 250 cc, open 1 hour

Recorder 1020 (12017N)

SIP 1596 psi (stab) at 5440

HP 2500 psi @ 5436'

2370 psi @ 5136'

2416 psi @ 5236'

2461 psi @ 5336'

Recorder 14206 (2409 N)

SIP 1603 psi at 5440'

HP 2511 psi

2378 psi

2424 psi

2471 psi

WLT S-2 @ 5436.5, 250 cc open 1 hour 35 minutes.

Recorder 1020 (12017 N)

SIP 1603 psi (stab) @ 5444.5'

HP 2502 psi @ 5442.5'

Recorder 14206 (2409 N)

SIP 1611 psi @ 5444.5'

HP 2514 psi @ 5442.5'

WLT S-3 mis run - shaped charge block failed

Recorder 1020 (12017 N)

HP 2509 psi @ 5446.5'

Recorder 14206 (2409 N)

HP 2521 psi @ 5446.5'

WLT S-3A @ 5440.5, 250 cc, open 2 hours 1 minute.

Recorder 1020 (12017 N)

SIP 1121 psi @ 5448.5'

HP 2506 psi @ 5446.5'

Recorder 14206 (2409 N)

SIP clock didn't run

HP --

WLT S-4 @ 5449', 250 cc, open 1 hour 30 minutes.

Recorder 14206 (2409 N)

SIP 1656 psi (stab) @ 5457'

HP 2521 psi @ 5455'

Recorder 13215 (7769 N)

SIP 1660 psi @ 5457'

HP 2522 psi @ 5455'

WLT S-5 @ 5457', 250 cc, open 2 hours.

Recorder 1020 (12017 N)

SIP 1651 psi (stab) @ 5465'

HP 2515 psi @ 5463'

Recorder 13215 (7769 N)

SIP 1656 psi @ 5465'

HP 2518 psi @ 5463'

WLT S-6 @ 5465.5', 250 cc, open 2 hours.

Recorder 1020 (12017 N)

SIP 591 psi @ 5473.5' (dry)

HP 2515 psi @ 5471.5'

Recorder 13215 (7769 N)

SIP 599 psi @ 5473.5'

HP 2525 psi @ 5471.5'

WLT S-7 @ 5469', 250 cc, open 2 hours.

Recorder 1020 (12017 N)

SIP 560 psi @ 5477' (dry)

HP 2517 psi @ 5475'

Recorder 13215 (7769 N)

SIP 567 psi @ 5477'

HP 2523 psi @ 5475'

SHELL OIL COMPANY
DAILY OPERATIONS REPORT

Well: North Desert Creek 32-13

Date: 6-7-59

Depth: 5588'

Drilled: \emptyset

Cored: \emptyset

Other Operations: Ran Schlumberger Wire Line Tests S-8, S-9, S-10, S-11, S-12, conditioned mud, running conventional DST B-13

Preliminary Data Determinations:

WLT S-8 @ 5468.5', 250 cc, open 2 hours

Recorder 1020 (12017 N)
SIP 539 psi @ 5476.5' (dry)
HP 2517 psi @ 5474.5'

Recorder 13215 (7769 N)
SIP 545 psi @ 5476.5'
HP 2545 psi @ 5474.5'

WLT S-9 @ 5502', 250 cc, open 2 hours

Recorder 1020 (12017 N)
SIP 1833 psi (stab) @ 5510'
HP 2534 psi @ 5508'

Recorder 13215 (7769 N)
SIP 1845 psi @ 5510'
HP 2544 psi @ 5508'

WLT S-10 @ 5539', 250 cc, open 1 hour 45 minutes

Recorder 1020 (12017 N)
SIP 1068 psi (stab) @ 5547'
HP 2547 psi @ 5545'

Recorder 13215 (7769 N)
SIP 1076 psi @ 5547'
HP 2555 psi @ 5545'

WLT S-11 @ 5556.5', 250 cc, open 2 hours

Recorder 1020 (12017 N)
SIP 593 psi @ 5564.5' (dry)
HP 2560 psi @ 5562.5'

Recorder 13215 (7769 N)
SIP 593 psi @ 5564.5'
HP 2565 psi @ 5562.5'

WLT S-12 @ 5440', 200 cc, open 5 hours

Recorder 1020 (12017 N)
SIP 1648 psi @ 5448' (nearly stab)
HP 2500 psi @ 5446'
2370 psi @ 5446'
2418 psi @ 5246'
2464 psi @ 5346'

Recorder 13215 (7769 N)
SIP 1656 psi @ 5448'
HP 2505 psi @ 5446'
2377 psi @ 5446'
2423 psi @ 5246'
2469 psi @ 5346'

SHELL OIL COMPANY
DAILY OPERATIONS REPORT

Well: North Desert Creek 32-13

Date: 6-3-59 to 6-9-59

Depth: 5588

Drilled: ⓪

Cored: ⓪

Other Operations:

Ran bit, conditioned mud, Ran conventional test B-13. Ran Gamma Ray log and tool joint locator. Ran conventional test B-14.

Preliminary Data Determinations:

DST B-13 5497.5 - 5509.5 Initial open 15 seconds, Initial shut in 4 hours, 4 minutes, open 1 hour, Final shut in 4 hours, 9 minutes, Dead until 45 minutes, faint blow to end of flow period. Recovered estimated 15-50' (0.1 - 0.2 bbls.) slightly oil cut oil base mud.

	(7769N)	(12017N)	(2430N)	
Recorder	HK 13215/	HK 1020/	AK-1 1051/	AK-1 1050 (2457N)
Depth	5524.5'	5518'	5504.5'	5489'
IHP	2558 psi	2541 psi	2548 psi	clock
ISIP	1827 psi	1810 psi	1810 psi	did
IFFP (nearly stab.)	36 psi	22 psi	20 psi	not
FFP	39 psi	24 psi	23 psi	run
FSIP (rising)	1763 psi	1747 psi	1751 psi	
FHP	Not readable	-	-	

DST B-14 5462.5 - 5474.5 (misrun) Initial open 15 seconds, Initial shut in 4 hours, open 1 hour, 1 minute, final shut in 4 hours, 5 minutes. Moderate blow immediately after tool open decreasing slightly to end of open period. Recovered approximately 10' of oil base mud and gas cut formation oil.

	(7769N)	(12017N)	(2457N)	
Recorder	HK 13215/	HK 1020/	AK-1 1050/	AK-1 1051 (2430N)
Depth	5490'	5483.5'	5454'	5469.5'
IHP	2530	2518	2507	2515
ISIP	Failed	-	-	-
IFFP	35	28	21	24
FFP	42	39	27	31
FSIP	Failed	-	-	-
FHP	Not readable	-	2507	2515

SHELL OIL COMPANY
DAILY OPERATIONS REPORT

Well: North Desert Creek 32-13

Date: 6-10-59

Depth: 5588

Drilled: 0

Cored: 0

Other Operations:

Ran conventional test B-15

Preliminary Data Determinations:

DST B-15 5438 - 5462 Initial open 20 sec., Initial shut in 4 hrs., open 1 hr., Final shut in 4 hrs., 2 min. Faint blow in two minutes, weak blow in 8 minutes to end of open period. Gas to surface 57 minutes. Recovered 180' (.9 bbls.) oil base mud and gas cut formation oil.

		(12017N)	(2457N)
Recorder	HK 12215(7769N)	HK 1020/	AK-1 1050/ AK-1 1051(2430N)
Depth	5477.5'	5471'	5429.5' 5457'
IHP	Not readable -	-	2498 psi 2504 psi
ILIP (nearly stab.)	1653 psi	1644 psi	1625 psi 1635 psi
IFP	41 psi	37 psi	15 psi 26 psi
FFP	76 psi	69 psi	56 psi 62 psi
FSIP (rising)	1607 psi	1602 psi	1581 psi 1593 psi
FHP	Not readable	-	2504 psi 2512 psi

Remarks:

SHELL OIL COMPANY
DAILY OPERATIONS REPORT

Well: North Desert Creek 32-1.3

Date: 6-11-59

Depth: 5588'

Drilled: Ø

Cored: Ø

Other Operations:

Ran conventional test B-16. Ran bit conditioned mud.

Preliminary Data Determinations:

DST B-16 5428-5438.5 Initial open 15 seconds, initial shut in 4 hours 3 minutes, open 1 hour, final shut in 4 hours. Weak blow in 1 minute, moderate blow in 29 minutes to end of flow period. Gas to surface 12 minutes. Recovered 425' (3.6 barrels) oil base mud and gas cut formation oil.

		(2430N)	(7769N)
Recorder	AK-1 2.050 (2457N)	AK-2 1051/	HK 13215/ HK 1020 (12017N)
Depth	5419'	5432'	5452' 5446'
IHP	2491 psi	2497 psi	Perforations
ISIP (nearly stab.)	1589	1592	Plugged
IFP	56	64	
FWP	113	114	
FSIP (rising)	1557	1565	
FHP	2496	2498	

SHELL OIL COMPANY
DAILY OPERATIONS REPORT

Well: North Desert Creek 32-13

Date: 6-12-59 to 6-13-59

Depth: 5588

Drilled: 0

Cored: 0

Other Operations:

Ran conventional test B-17 and B-14A

Preliminary Data Determinations:

DST B-17 5418 ~ 5426 Initial open 30 sec., Initial shut in 4 hrs., open 1 hr., Final shut in 4 hrs., no blow. Recovered 15' oil base mud.

	HK 13215	HK 1020	AK-1 1050	AK-1 1051
Recorder	(7769N)	(12017N)	(2457N)	(2430N)
Depth	5439.5'	5433.5'	5502.5'	5419.5'
IHP	Not readable		2483 psi	2490 psi
ISIP (dry)	33 psi	27 psi	25 psi	29 psi
IFP	45 psi	38 psi	13 psi	18 psi
FFP	32 psi	27 psi	12 psi	17 psi
FSIP (dry)	33 psi	27 psi	16 psi	21 psi
FHP	Not readable		2483 psi	2489 psi

Remarks:

DST B-14A 5461 ~ 5473 Initial open 20 sec., Initial shut in 4 hrs., 2 min., open 1 hr., Final shut in 4 hrs., moderate blow immediately to end of flow period. Recovered 60' oil base mud and gas cut formation oil.

	HK-13215	HK-1020	AK-1 1050	AK-1 1051
Recorder	(7769N)	(12017N)	(2457N)	(2430N)
Depth	5486.5'	5480.5'	5452.5'	5466'
IHP	Not readable	Stylus	2503 psi	Clock
ISIP(rising sli.)	1659 psi	disengaged	1631 psi	did
IFP	35 psi	while making	19 psi	not
FFP	42 psi	up test tool	29 psi	run.
FSIP(rising)	1627 psi	-	1600 psi	-
FHP	Not readable	-	-	-

SHELL OIL COMPANY
DAILY OPERATIONS REPORT

Well: North Desert Creek 32-13

Date: 6-13-59 to 6-14-59

Depth: 5588

Drilled: 0

Cored: 0

Other operations:

Laid down drill pipe. Ran Guiberson packer on tubing.
Set packer at 5362'. Circulated oil base mud above packer
out with water. Released rig.

Preliminary Data Determinations:

Remarks:

PRELIMINARY REPORT

Bureau No. 42-R355.4. Approval expires 12-31-60.

U. S. LAND OFFICE Navajo SERIAL NUMBER 14-20-603-247 LEASE OR PERMIT TO PROSPECT

Grid for well location with 'X' and '13' in the center.

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 158, Farmington, N.M. Lessor or Tract Tribal - North Desert Creek Field Rutherford State Utah Well No. 32-13 Sec. 13 T. 41S. R. 23E Meridian SLIM County San Juan Location 1881 ft. of N. Line and 1279 ft. of E. Line of Sec. 13 Elevation KB 4652

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.

Signed R. S. Mac ALISTER, JR. Title Exploitation Engineer

Date November 27, 1959

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

Commenced drilling May 8, 1959. Finished drilling June 4, 1959.

OIL OR GAS SANDS OR ZONES

Open Hole (Denote gas by G)

No. 1, from 5421 to 5588 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 to No. 3, from to No. 2, from to No. 4, from to

CASING RECORD

Table with columns: Size casing, Weight per foot, Threads per inch, Make, Amount, Kind of shoe, Cut and pulled from, Perforated (From-To), Purpose. Includes handwritten notes and a 'HISTORICAL RECORD' stamp.

MUDDING AND CEMENTING RECORD

Table with columns: Size casing, Where set, Number sacks of cement, Method used, Mud gravity, Amount of mud used. Includes handwritten entries for 16", 10-3/4", and 7" casings.

PLUGS AND ADAPTERS

Heaving plug—Material Length Depth set Adapters—Material Size

FOLD MARK

FOLD OVER

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 feet to ~~5588~~ feet, and from feet to feet
 Cable tools were used from feet to feet, and from feet to feet

DATES

Suspended 40-acre test well
 June 14, 1959 Put to producing, 19.....
 The production for the first 24 hours was barrels of fluid of which% was oil;%
 emulsion;% water; and% sediment. Gravity, °Bé.
 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 Rutledge Drilling Company Driller
 Driller Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
<u>ELECTRIC LOG TOPS</u>			
2204	2255	51	Shinarump
2255	2341	86	Moenkopi
2341	4409	2068	Cutler
4409	5403	994	Hermosa
5403	-	-	Paradox

(OVER)
 FORMATION RECORD—CONTINUED

16-43094-4

DEC 2 1959

PRELIMINARY REPORT

U. S. LAND OFFICE Navajo
SERIAL NUMBER 14-20-603-247
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 158, Farmington, U.M.
Lessor or Tract Tribal - North Desert Creek Field Ratherford State Utah
Well No. 32-13 Sec. 13 T. 41N R. 23E Meridian SLR County San Juan
Location 1981 ft. S. of N. Line and 1979 ft. W. of E. Line of Sec. 13 Elevation KB 4652
(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.

Signed Original signed by R. S. Mac ALISTER, JR.

Date November 27, 1959 Title Exploitation Engineer

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

Commenced drilling May 8, 1959. Finished drilling June 4, 1959.

OIL OR GAS SANDS OR ZONES

Open Hole (Denote gas by G)

No. 1, from 5421 to 5588 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 _____ 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—	
16"	142	8	AMERICAN	5407	---	5421	5588	Production	
10-3/4"	83	8	AMERICAN	---	---	---	---	---	
7"	53	8	AMERICAN	---	---	---	---	---	

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
16"	70	105	Displacement	---	---
10-3/4"	1378	200	Displacement	---	---
7"	5421	200	Displacement	---	---

PLUGS AND ADAPTERS

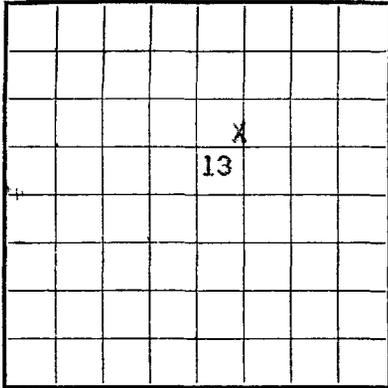
Heaving plug—Material _____ Length _____ Depth set _____
Adapters—Material _____ Size _____

FOLD MARK

PRELIMINARY REPORT

Bureau No. 42-R355.4
Approval expires 12-31-60.

U. S. LAND OFFICE Navajo
SERIAL NUMBER 14-20-603-247
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 158, Farmington, N.M.
Lessor or Tract Tribal - North Desert Creek Field Ratherford State Utah
Well No. 32-13 Sec. 13 T41S R. 23E Meridian SLM County San Juan
Location 1881 ft. S. of N. Line and 1979 ft. W. of E. Line of Sec. 13 Elevation KB 4652
(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.

Signed Original signed by
R. S. Mac ALISTER, JR.
Title Exploitation Engineer

Date November 27, 1959

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

Commenced drilling May 8, 1959. Finished drilling June 4, 1959.

OIL OR GAS SANDS OR ZONES

Open Hole (Denote gas by G)

No. 1, from 5421 to 5588 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 _____ 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—	
16" open hole	14.9	8	10	5407	1	5421	5588	Production	
<p>16" If logs or bridges were run in to test for water, state kind of material used, position, and results of running or drilling. If logs or bridges were run in the well, state size and location. If the well has been abandoned, give date, size, position, and results of abandonment. If logs or bridges were run in the well, state size and location. If the well has been abandoned, give date, size, position, and results of abandonment. If logs or bridges were run in the well, state size and location. If the well has been abandoned, give date, size, position, and results of abandonment.</p>									
<p>7" It is of the greatest importance to have a complete history of the well. Please state in detail the dates of running or pulling casing.</p>									

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
16"	70	105	Displacement	-	-
10-3/4"	1378	200	Displacement	-	-
7"	5421	200	Displacement	-	-

PLUGS AND ADAPTERS

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

FOLD MARK

FOLD M 7

5421 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 5588 feet, and from feet to feet
 Cable tools were used from feet to feet, and from feet to feet

DATES

Suspended 40-acre test well
 June 14, 1959 Put to producing 19.....
 The production for the first 24 hours was barrels of fluid of which% was oil;%
 emulsion;% water; and% sediment. Gravity, °Bé.
 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 Rutledge Drilling Company Driller
 Driller Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
<u>ELECTRIC LOG TOPS</u>			
2204	2255	51	Shinarump
2255	2341	86	Moenkopi
2341	4409	2068	Cutler
4409	5403	994	Hermosa
5403	-	-	Paradox
FROM—	TO—	TOTAL FEET	FORMATION

FORMATION RECORD—CONTINUED

16-43004-4

DEC 2 1959

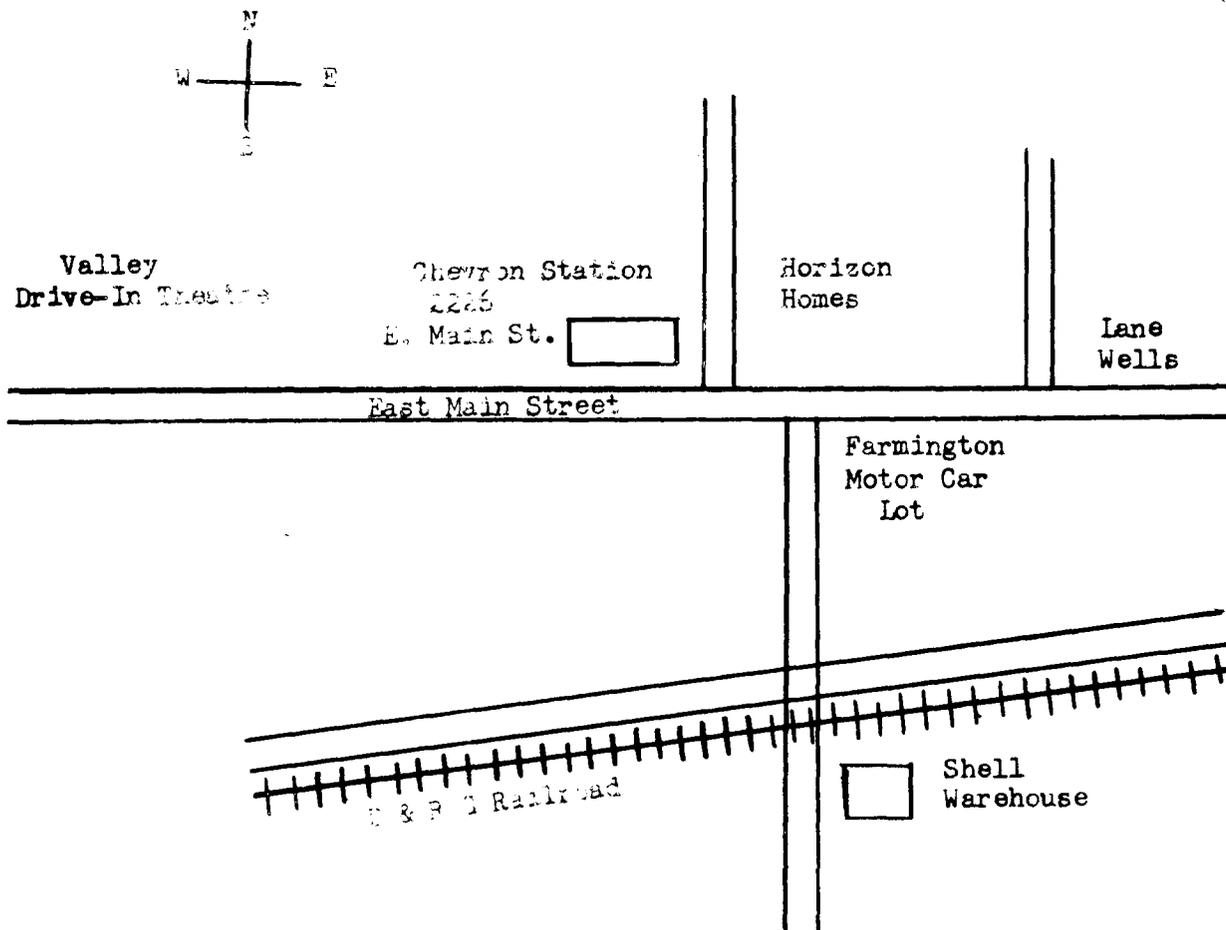
CORE PARTY NOTICE

SHELL OIL COMPANY

- (1) North Desert Creek #41-12 located in Section 12, T. 41 S., R. 23 E.,
San Juan County, Utah
- (2) North Desert Creek #32-13 located in Section 13, T. 41 S., R. 23 E.,
San Juan County, Utah
- (3) State Three #32-16 located in Section 16, T. 40 S., R. 24 E.,
San Juan County, Utah

Cores will be available for description and sampling at 8:00 A.M.
on Friday, August 14, 1959 at the Shell warehouse in Farmington, New Mexico. The
warehouse is located as follows.

*MH
8-11*



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CORE ANALYSIS RESULTS

Company Shell Oil Company Formation Desert Creek File RP-3-999
 Well Ratherford 32 - 13 Core Type Diamond Conv. Date Report 6/2/59
 Field Ratherford Drilling Fluid Black Magic Analysts English
 County San Juan State Utah Elev. 4652 KB Location Sec13 41S 23E

Lithological Abbreviations

SAND - SD DOLOMITE - DOL ANHYDRITE - ANHY FINE - FN CRYSTALLINE - XLN BROWN - BRN FRACTURED FRAC SLIGHTLY - SL/
 SHALE - SH CHERT - CH CONGLOMERATE - CONG SHALY - SHY MEDIUM - MED GRAIN - GRN GRAY - GY LAMINATION - LAM VERY - V/
 LIME - LM GYPSUM - GYP FOSSILIFEROUS - FOES COARSE - CSE GRANULAR - GRNL VUGGY - VGY STYLOLITIC - STY WITH - W/

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCS		POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
		Max.	90°		OIL	TOTAL WATER	
1	5423-25.5	0.3	0.1	4.5	15.0	50.6	
		0.6	0.1				
2	25.5-28.2	0.1	0.1	4.8	12.6	47.3	
		0.1	0.1				
3	28.2-30.9	0.1	0.1	14.3	44.9	8.1	
		0.4	0.3				
4	30.9-32.8	1.9	1.3	13.9	33.5	12.5	
		0.8	0.4				
5	32.8-35.0	1.6	1.5	13.1	33.4	10.6	Vertical Fracture
		0.1	0.1				
		0.2	0.1				
6	35.0-37.5	0.6	0.3	5.4	21.3	25.0	Vertical Fracture
		**					
		0.2	0.1				
7	37.5-40.7	0.1	0.1	8.0	24.5	25.0	
		0.2	0.1				
8	40.7-43.1	0.1	0.1	6.8	17.2	25.8	
		0.1	0.1				
		0.2	0.1				
9	43.1-45.8	0.1	0.1	10.0	36.1	20.2	
		0.1	0.1				
		0.2	0.2				
10	45.8-48.3	1.8	0.9	14.7	51.0	11.6	
		2.5	2.2				
11	48.3-50.8	1.9	1.8	9.4	35.8	21.0	
		0.1	0.1				
		0.1	0.1				
12	50.8-53.2	0.1	0.1	8.4	61.4	25.8	
		0.1	0.1				
13	53.2-55.3	0.1	0.1	8.7	29.9	31.5	
		1.1	0.4				
		0.5	0.1				
14	55.3-58.0	0.4	0.3	10.1	33.6	25.5	
		0.1	0.1				
15	58.0-60.4	1.1	1.0	4.8	29.0	34.2	
		1.0	0.9				
16	60.4-62.9	0.1	0.1	3.3	31.0	39.2	
		0.1	0.1				
		0.3	0.1				
17	62.9-65.3	0.1	0.1	6.5	27.2	34.8	
		0.4	0.2				

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CORE ANALYSIS RESULTS

Company Shell Oil Company Formation Desert Creek File RP-3-999
 Well Ratherford 32 - 13 Core Type Diamond Conv. Date Report 6/2/59
 Field Ratherford Drilling Fluid Black Magic Analysts English
 County San Juan State Utah Elev. 4652 KB Location Sec13 41S 23E

Lithological Abbreviations

SAND - SD SHALE - SH LIME - LM
 DOLOMITE - DOL
 CHERT - CH
 GYPSUM - GYP
 ANHYDRITE - ANHY
 CONGLOMERATE - CONG
 FOSSILIFEROUS - FOSS
 SANDY - SDY
 SHALY - SHY
 LIMY - LMY
 FINE - FN
 MEDIUM - MED
 COARSE - CSE
 CRYSTALLINE - XLN
 GRAIN - GRN
 GRANULAR - GRNL
 BROWN - BRN
 GRAY - GY
 VUGGY - VGY
 FRACTURED - FRAC
 LAMINATION - LAM
 STYLOLITIC - STY
 SLIGHTLY - SL/
 VERY - V/
 WITH - W/

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYs	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
				OIL	TOTAL WATER	
18	5465.3-67.8	0.1	<0.1	8.8	40.0	18.0
		1.5	1.3			
		0.3	0.2			
19	67.8-70.0	0.1	<0.1	7.4	30.7	28.0
		0.1	<0.1			
20	5470-73.0	*7.8	2.0	0.77	22.7	46.9
		0.1	<0.1			
		0.1	<0.1			

* Stylolite

** Broken core

Service # 8 No Interpretation of results .

Permeabilities were ran one sample per foot

CORE ANALYSIS RESULTS

Company Shell Oil Company Formation Desert Creek File RP-3-999
 Well Ratherford 32-13 Core Type Diamond Conv. Date Report 6/5/59
 Field Ratherford Drilling Fluid Black Magic Analysts English
 County San Juan State Utah Elev. 4652 KB Location Sec13 41S 23E

Lithological Abbreviations

SAND - SD DOLOMITE - DOL ANHYDRITE - ANHY SANDY - SDY FINE - FN CRYSTALLINE - XLN BROWN - BRN FRACTURED - FRAC SLIGHTLY - SL/
 SHALE - SH CHERT - CH CONGLOMERATE - CONG SHALY - SHY MEDIUM - MED GRAIN - GRN GRAY - GY LAMINATION - LAM VERY - V/
 LIME - LM GYPSUM - GYP FOSSILIFEROUS - FOSS LIMY - LMY COARSE - CSE GRANULAR - GRNL VUGGY - VGY STYLOLITIC - STY WITH - W/

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYS Max.	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
				OIL	TOTAL WATER	
21	5473.0-74.5	<0.1	0.8	30.4	49.3	
22	74.7-76.4	0.3	0.8	34.6	49.5	
23	76.7-78.4	<0.1	1.5	19.7	69.5	
24	78.7-80.3	<0.1	1.8	34.3	48.1	
25	80.6-82.4	<0.1	2.7	10.7	77.6	
26	82.7-84.5	0.1	0.9	22.1	26.8	
27	84.8-86.3	<0.1	1.2	23.1	47.9	
28	86.7-88.4	<0.1	2.1	8.9	79.0	
29	88.7-90.3	<0.1	3.0	9.1	80.1	
30	90.7-92.3	<0.1	1.8	10.9	78.3	
31	92.6-94.2	0.2	0.6	16.7	61.6	
32	94.5-96.3	*	0.8	30.0	35.0	
33	96.6-98.2	<0.1	2.1	9.7	74.4	
34	98.6-5500.3	<0.1	11.8	20.6	39.0	
35	5500.7-02.4	0.1	13.6	21.0	35.2	
36	02.7-04.3	0.4	7.0	8.8	68.3	
37	04.6-06.4	<0.1	10.6	10.8	66.3	
38	06.7-08.4	0.1	6.0	6.3	63.4	
39	08.7-10.3	<0.1	3.4	7.6	69.4	
40	10.7-12.2	<0.1	0.9	19.6	33.2	
41	12.5-14.5	<0.1	0.8	29.4	21.3	
42	5514.7-16.5	*	0.8	23.1	46.2	

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CORE ANALYSIS RESULTS

Company Shell Oil Company Formation Desert Creek File RP-3-999
 Well Ratherford 32 - 13 Core Type Diamond Conv. Date Report 6/5/59
 Field Ratherford Drilling Fluid Black Magic Analysts English
 County San Juan State Utah Elev 4652 KB Location Sec13 41S 23E

Lithological Abbreviations

SAND - SD DOLOMITE - DOL ANHYDRITE - ANHY SANDY - SDY FINE FN CRYSTALLINE - XLN BROWN - BRN FRACTURED - FRAC SLIGHTLY - SL/
 SHALE - SH CHERT - CH CONGLOMERATE - CONG SHALY - SHY MEDIUM - MED GRAIN - GRN GRAY - GY LAMINATION - LAM VERY - V/
 LIME - LM GYPSUM - GYP FOSSILIFEROUS - FOSS LIMY - LMY COARSE - CSE GRANULAR - GRNL VUGGY - VGY STYLOLITIC - STY WITH - W/

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCY		POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
		Max.	90 ^a		OIL	TOTAL WATER	
43	5516.7-18.2	*	*	0.6	0.0	24.2	
44	18.5-20.3	<0.1	<0.1	3.7	0.0	85.0	
45	20.6-23.0	<0.1	<0.1	6.0	0.0	92.1	

SERVICE # 8 No Interpretation of Results

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CORE ANALYSIS RESULTS

Company Shell Oil Company Formation Desert Creek File RP-3-999
 Well Ratherford 32-13 Core Type Diamond Conv. Date Report 6/6/59
 Field Ratherford Drilling Fluid Black Magic Analysts English
 County San Juan State Utah Elev. 4652 KB Location Sec13 41S 23E

Lithological Abbreviations

SAND - SD DOLOMITE - DOL ANHYDRITE - ANHY SANDY - SDY FINE - FN CRYSTALLINE - XLN BROWN - BRN FRACTURED - FRAC SLIGHTLY - SL/
 SHALE - SH CHERT - CH CONGLOMERATE - CONG SHALY - SHY MEDIUM - MED GRAIN - GRN GRAY - GY LAMINATION - LAM VERY - V/
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SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYs		POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
		Max.	90°		OIL	TOTAL WATER	
46	5523.5-25.0	<0.1	<0.1	2.6	8.6	70.7	
47	25.0-28.3	0.1	<0.1	3.4	12.9	64.6	
		<0.1	<0.1				
		13	1.1				
48	28.3-31.0	<0.1	<0.1	3.6	11.2	65.8	
		<0.1	<0.1				
		1.7	<0.1				
49	31.0-33.4	<0.1	<0.1	3.2	12.2	64.6	
		<0.1	<0.1				
50	33.4-36.0	1.2	0.2	10.5	37.0	26.3	
		23	14				
		1.2	0.3				
51	36.0-38.5	2.2	1.9	9.7	31.9	22.4	
		25	10				
		3.8	0.9				
52	38.5-41.0	6.6	1.7	8.9	28.5	23.2	
		15	10				
53	41.0-43.4	36	23	6.2	23.7	23.5	
		2.2	1.7				
		1.9	1.7				
54	43.4-46.0	2.3	0.8	5.3	21.1	21.1	
		0.6	0.4				
55	46.0-48.4	1.9	1.7	2.7	15.3	40.6	
		<0.1	<0.1				
56	48.4-50.5	<0.1	<0.1	1.8	9.1	54.5	
		0.5	0.1				
		0.1	<0.1				
57	50.5-53.2	<0.1	<0.1	6.9	4.9	70.6	
		0.1	<0.1				
58	53.2-56.0	<0.1	<0.1	10.4	25.1	44.4	
		0.5	0.3				
		2.0	0.7				
59	56.0-58.3	5.0	3.7	10.8	33.8	26.1	
		*	*				
60	58.3-61.0	<0.1	<0.1	7.0	19.0	46.7	
		0.1	<0.1				
		0.8	0.6				
61	61.0-63.4	0.1	<0.1	3.4	10.2	45.6	
		0.1	<0.1				
62	5563.4-65.0	0.1	<0.1	3.0	11.0	47.9	
		0.1	<0.1				

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CORE ANALYSIS RESULTS

Company Shell Oil Company Formation Desert Creek File RP-3-999
 Well Ratherford 32-13 Core Type Diamond Conv. Date Report 6/6/59
 Field Ratherford Drilling Fluid Black Magic Analysts English
 County San Juan State Utah Elev 4652 KB Location Sec13 41S 23E

Lithological Abbreviations

SAND - SD	DOLOMITE - DOL	ANHYDRITE - ANHY	SANDY - SDY	FINE - FN	CRYSTALLINE - XLN	BROWN - BRN	FRACTURED - FRAC	SLIGHTLY - SL/
SHALE - SH	CHERT - CH	CONGLOMERATE - CONG	SHALY - SHY	MEDIUM - MED	GRAIN - GRN	GRAY - GY	LAMINATION - LAM	VERY - V/
LIME - LM	GYPHUM - GYP	FOSSILIFEROUS - FOSS	LIMY - LMY	COARSE - CSE	GRANULAR - GRNL	VUGGY - VGY	STYLOLITIC - STY	WITH - W/

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCS		POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
		Max.	90°		OIL	TOTAL WATER	
63	5565.0-68.0	0.1	<0.1	9.1	26.8	42.1	
		0.1	<0.1				
		0.4	0.1				
64	68.0-71.0	0.1	<0.1	7.4	15.4	43.1	
		0.1	<0.1				
		0.7	0.5				
65	71.0-73.5	0.1	<0.1	4.4	0.7	40.3	
		0.1	<0.1				
		0.1	<0.1				
66	73.5-76.2	0.1	<0.1	8.5	6.5	81.2	
		0.1	<0.1				
		0.1	<0.1				
67	76.2-78.0	0.1	<0.1	4.3	7.2	85.6	
		0.1	<0.1				
		0.1	<0.1				

SERVICE # 8 NO INTERPRETATION OF RESULTS

CORE ANALYSIS RESULTS

Company Shell Oil Company Formation Desert Creek File RP-3-999
 Well Ratherford 32 - 13 Core Type Diamond Conv. Date Report 6/2/59
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 LINE - LM GYPSUM - GYP FOSSILIFEROUS - FOSS LIMY - LIMY COARSE - CSE GRANULAR - GRNL VUGGY - VGY STYLOLITIC - STY WITH - W/

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCS		POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
		Max.	90°		OIL	TOTAL WATER	
1	5423-25.5	0.3	0.1	4.5	15.0	50.6	
		0.6	<0.1				
2	25.5-28.2	0.1	<0.1	4.8	12.6	47.3	
		0.1	<0.1				
3	28.2-30.9	0.1	<0.1	14.3	44.9	8.1	
		0.4	0.3				
4	30.9-32.8	1.9	1.3	13.9	33.5	12.5	
		0.8	0.4				
5	32.8-35.0	1.6	1.5	13.1	33.4	10.6	Vertical Fracture
		0.1	<0.1				
		0.2	0.1				
6	35.0-37.5	0.6	0.3	5.4	21.3	25.0	Vertical Fracture
		**					
		0.2	<0.1				
7	37.5-40.7	0.1	0.1	8.0	24.5	25.0	
		0.2	0.1				
8	40.7-43.1	0.1	<0.1	6.8	17.2	25.8	
		0.1	<0.1				
		0.2	<0.1				
9	43.1-45.8	0.1	<0.1	10.0	36.1	20.2	
		0.1	<0.1				
		0.2	0.2				
10	45.8-48.3	1.8	0.9	14.7	51.0	11.6	
		2.5	2.2				
11	48.3-50.8	1.9	1.8	9.4	35.8	21.0	
		0.1	<0.1				
		0.1	<0.1				
12	50.8-53.2	0.1	<0.1	8.4	61.4	25.8	
		0.1	<0.1				
13	53.2-55.3	0.1	<0.1	8.7	29.9	31.5	
		1.1	0.4				
		0.5	0.1				
14	55.3-58.0	0.4	0.3	10.1	33.6	25.5	
		0.1	0.1				
15	58.0-60.4	1.1	1.0	4.8	29.0	34.2	
		1.0	0.9				
16	60.4-62.9	<0.1	<0.1	3.3	31.0	39.2	
		0.1	<0.1				
		0.3	0.1				
17	62.9-65.3	0.1	<0.1	6.5	27.2	34.8	
		0.4	0.2				

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CORE ANALYSIS RESULTS

Company Shell Oil Company Formation Desert Creek File RP-3-999
 Well Ratherford 32 - 13 Core Type Diamond Conv. Date Report 6/2/59
 Field Ratherford Drilling Fluid Black Magic Analysts English
 County San Juan State Utah Elev. 4652 KB Location Sec13 41S 23E

Lithological Abbreviations

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 SHALE - SH CHERT - CH CONGLOMERATE - CONG SHALY - SHY MEDIUM - MED GRAIN - GRN GRAY - GY LAMINATION - LAM VERY - V/
 LIME - LM GYPSUM - GYP FOSSILIFEROUS - FOSS LIMY - LMY COARSE - CSE GRANULAR - GRNL VUGGY - VGY STYLOLITIC - STY WITH - W/

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYs Max.	POROSITY PER CENT 90	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
				OIL	TOTAL WATER	
18	5465.3-67.8	0.1	<0.1	8.8	40.0	18.0
		1.5	1.3			
		0.3	0.2			
19	67.8-70.0	0.1	<0.1	7.4	30.7	28.0
		0.1	<0.1			
20	5470-73.0	*7.8	2.0	0.77	22.7	46.9
		0.1	<0.1			
		0.1	<0.1			

* Stylolite
 ** Broken core

Service # 8 No Interpretation of results .

Permeabilities were ran one sample per foot

CORE ANALYSIS RESULTS

Company Shell Oil Company Formation Desert Creek File RP-3-999
 Well Ratherford 32-13 Core Type Diamond Conv. Date Report 6/5/59
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SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCS		POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
		Max.	90°		OIL	TOTAL WATER	
21	5473.0-74.5	∅.1	∅.1	0.8	30.4	49.3	
		∅.1	∅.1				
22	74.7-76.4	0.3	∅.1	0.8	34.6	49.5	
		∅.1	∅.1				
23	76.7-78.4	∅.1	∅.1	1.5	19.7	69.5	
		∅.1	∅.1				
24	78.7-80.3	∅.1	∅.1	1.8	34.3	48.1	
		∅.1	∅.1				
25	80.6-82.4	∅.1	∅.1	2.7	10.7	77.6	
		∅.1	∅.1				
26	82.7-84.5	0.1	∅.1	0.9	22.1	26.8	
		∅.1	∅.1				
27	84.8-86.3	∅.1	∅.1	1.2	23.1	47.9	
28	86.7-88.4	∅.1	∅.1	2.1	8.9	79.0	
		∅.1	∅.1				
29	88.7-90.3	∅.1	∅.1	3.0	9.1	80.1	
		∅.1	∅.1				
30	90.7-92.3	∅.1	∅.1	1.8	10.9	78.3	
31	92.6-94.2	0.2	0.1	0.6	16.7	61.6	
		∅.1	∅.1				
32	94.5-96.3	*	*	0.8	30.0	35.0	
33	96.6-98.2	∅.1	∅.1	2.1	9.7	74.4	
		*	*				
34	98.6-5500.3	∅.1	∅.1	11.8	20.6	39.0	
		0.2	0.2				
35	5500.7-02.4	0.1	0.1	13.6	21.0	35.2	
		0.1	0.1				
36	02.7-04.3	0.4	0.2	7.0	8.8	68.3	
		∅.1	∅.1				
37	04.6-06.4	∅.1	∅.1	10.6	10.8	66.3	
		∅.1	∅.1				
38	06.7-08.4	0.1	∅.1	6.0	6.3	63.4	
39	08.7-10.3	0.1	∅.1	3.4	7.6	69.4	
		∅.1	∅.1				
40	10.7-12.2	∅.1	∅.1	0.9	19.6	33.2	
		0.2	∅.1				
41	12.5-14.5	∅.1	∅.1	0.8	29.4	21.3	
		∅.1	∅.1				
42	5514.7-16.5	*	*	0.8	23.1	46.2	
		*	*				

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CORE ANALYSIS RESULTS

Company Shell Oil Company Formation Desert Creek File RP-3-999
 Well Ratherford 32 - 13 Core Type Diamond Conv. Date Report 6/5/59
 Field Ratherford Drilling Fluid Black Magic Analysts English
 County San Juan State Utah Elev. 4652 KB Location Sec13 41S 23E

Lithological Abbreviations

SAND - SD DOLOMITE - DOL ANHYDRITE - ANHY SANDY - SDY FINE - FN CRYSTALLINE - XLN BROWN - BRN FRACTURED - FRAC SLIGHTLY - SL/
 SHALE - SH CHERT - CH CONGLOMERATE - CONG SHALY - SHY MEDIUM - MED GRAIN - GRN GRAY - GY LAMINATION - LAM VERY - V/
 LIME - LM GYPSUM - GYP FOSSILIFEROUS - FOSS LIMY - LMY COARSE - CST GRANULAR - GRNL VUGGY - VGY STYLOLITIC - STY WITH - W/

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCY'S		POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
		Max.	90°		OIL	TOTAL WATER	
43	5516.7-18.2	*	*	0.6	0.0	24.2	
44	18.5-20.3	0.1	0.1	3.7	0.0	85.0	
45	20.6-23.0	0.1	0.1	6.0	0.0	92.1	

SERVICE # 8 No Interpretation of Results

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CORE ANALYSIS RESULTS

Company Shell Oil Company Formation Desert Creek File RP-3-999
 Well Ratherford 32-13 Core Type Diamond Conv. Date Report 6/6/59
 Field Ratherford Drilling Fluid Black Magic Analysts English
 County San Juan State Utah Elev. 4652 KB Location Sec13 41S 23E

Lithological Abbreviations

SAND - SD SHALE - SH LIMESTONE - LM DOLOMITE - DOL CHERT - CH GYPSUM - GYP ANHYDRITE - ANHY CONGLOMERATE - CONG FOSSILIFEROUS - FOSS SANDY - SDY SHALY - SHY LIMY - LMY FINE - FN MEDIUM - MED COARSE - CSE CRYSTALLINE - XLN GRAIN - GRN GRANULAR - GRNL BROWN - BRN GRAY - GY VUGGY - VGY FRACTURED - FRAC LAMINATION - LAM STYLOLITIC - STY SLIGHTLY - SL/ VERY - V/ WITH - W/

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCS		POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
		Max.	90°		OIL	TOTAL WATER	
46	5523.5-25.0	<0.1	<0.1	2.6	8.6	70.7	
47	25.0-28.3	0.1	<0.1	3.4	12.9	64.6	
		<0.1	<0.1				
		13	1.1				
48	28.3-31.0	<0.1	<0.1	3.6	11.2	65.8	
		<0.1	<0.1				
		1.7	<0.1				
49	31.0-33.4	<0.1	<0.1	3.2	12.2	64.6	
		<0.1	<0.1				
50	33.4-36.0	1.2	0.2	10.5	37.0	26.3	
		23	14				
		1.2	0.3				
51	36.0-38.5	2.2	1.9	9.7	31.9	22.4	
		25	10				
		3.8	0.9				
52	38.5-41.0	6.6	1.7	8.9	28.5	23.2	
		15	10				
53	41.0-43.4	36	23	6.2	23.7	23.5	
		2.2	1.7				
		1.9	1.7				
54	43.4-46.0	2.3	0.8	5.3	21.1	21.1	
		0.6	0.4				
55	46.0-48.4	1.9	1.7	2.7	15.3	40.6	
		<0.1	<0.1				
56	48.4-50.5	<0.1	<0.1	1.8	9.1	54.5	
		0.5	0.1				
		0.1	<0.1				
57	50.5-53.2	<0.1	<0.1	6.9	4.9	70.6	
		0.1	<0.1				
58	53.2-56.0	<0.1	<0.1	10.4	25.1	44.4	
		0.5	0.3				
		2.0	0.7				
59	56.0-58.3	5.0	3.7	10.8	33.8	26.1	
		*	*				
60	58.3-61.0	<0.1	<0.1	7.0	19.0	46.7	
		0.1	<0.1				
		0.8	0.6				
61	61.0-63.4	0.1	<0.1	3.4	10.2	45.6	
		0.1	<0.1				
62	5563.4-65.0	0.1	<0.1	3.0	11.0	47.9	
		0.1	<0.1				

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CORE ANALYSIS RESULTS

Company Shell Oil Company Formation Desert Creek File RP-3-999
 Well Ratherford 32-13 Core Type Diamond Conv. Date Report 6/6/59
 Field Ratherford Drilling Fluid Black Magic Analysts English
 County San Juan State Utah Elev 4652 KB Location Sec13 41S 23E

Lithological Abbreviations

SAND - SD DOLOMITE - DOL ANHYDRITE - ANHY SANDY - SDY FINE FN CRYSTALLINE - XLN BROWN - BRN FRACTURED - FRAC SLIGHTLY - BL/
 SHALE - SH CHERT - CH CONGLOMERATE - CONG SHALY - SHY MEDIUM - MED GRAIN - GRN GRAY - GY LAMINATION - LAM VERY - V/
 LIME - LM GYPSUM - GYP FOSSILIFEROUS - FOSS LIMY - LMY COARSE - CSE GRANULAR - GRNL VUGGY - VGY STYLOLITIC - STY WITH - W/

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCS		POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
		Max.	90°		OIL	TOTAL WATER	
63	5565.0-68.0	0.1	0.1	9.1	26.8	42.1	
		0.1	0.1				
		0.4	0.1				
64	68.0-71.0	0.1	0.1	7.4	15.4	43.1	
		0.1	0.1				
		0.7	0.5				
65	71.0-73.5	0.1	0.1	4.4	0.7	40.3	
		0.1	0.1				
66	73.5-76.2	0.1	0.1	8.5	6.5	81.2	
		0.1	0.1				
		0.1	0.1				
67	76.2-78.0	0.1	0.1	4.3	7.2	85.6	
		0.1	0.1				

SERVICE # 8 NO INTERPRETATION OF RESULTS

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CORE ANALYSIS RESULTS

Company	Shell Oil Company	Formation	Desert Creek	File	RP-3-999
Well	Ratherford 32 - 13	Core Type	Diamond Conv.	Date Report	6/2/59
Field	Ratherford	Drilling Fluid	Black Magic	Analysis	English
County	San Juan State Utah	Elev.	4652 KB	Location	Sec13 41S 23E

Lithological Abbreviations

SAND SD SHALE SH LIME-LM	DOLOMITE DOL CHERT CH GYPSUM GYP	ANHYDRITE ANHY CONGLOMERATE CONG FOSSILIFEROUS FOSS	SANDY-SNDY SHALY SHY LIMY-LMY	FINE FN MEDIUM-MED COARSE-CSE	CRYSTALLINE XLN GRAIN GRN GRANULAR GRNL	BROWN BRN GRAY GY JUGGY-VGY	FRACTURED FRAC LAMINATION LAM STR. ODDLY STR	SLIGHTLY-SL/ VERY-V/ WITH W.
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SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYs		POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
		Max.	90°		OIL	TOTAL WATER	
1	5423-25.5	0.3	0.1	4.5	15.0	50.6	
		0.6	<0.1				
2	25.5-28.2	0.1	<0.1	4.8	12.6	47.3	
		0.1	<0.1				
3	28.2-30.9	0.1	<0.1	14.3	44.9	8.1	
		0.4	0.3				
4	30.9-32.8	1.9	1.3	13.9	33.5	12.5	
		0.8	0.4				
5	32.8-35.0	1.6	1.5	13.1	33.4	10.6	Vertical Fracture
		0.1	<0.1				
		0.2	0.1				
6	35.0-37.5	0.6	0.3	5.4	21.3	25.0	Vertical Fracture
		**					
		0.2	<0.1				
7	37.5-40.7	0.1	0.1	8.0	24.5	25.0	
		0.2	0.1				
8	40.7-43.1	0.1	<0.1	6.8	17.2	25.8	
		0.1	<0.1				
		0.2	<0.1				
9	43.1-45.8	0.1	<0.1	10.0	36.1	20.2	
		0.1	<0.1				
		0.2	0.2				
10	45.8-48.3	1.8	0.9	14.7	51.0	11.6	
		2.5	2.2				
11	48.3-50.8	1.9	1.8	9.4	35.8	21.0	
		0.1	<0.1				
		0.1	<0.1				
12	50.8-53.2	0.1	<0.1	8.4	61.4	25.8	
		0.1	<0.1				
13	53.2-55.3	0.1	<0.1	8.7	29.9	31.5	
		1.1	0.4				
		0.5	0.1				
14	55.3-58.0	0.4	0.3	10.1	33.6	25.5	
		0.1	0.1				
15	58.0-60.4	1.1	1.0	4.8	29.0	34.2	
		1.0	0.9				
16	60.4-62.9	<0.1	<0.1	3.3	31.0	39.2	
		0.1	<0.1				
		0.3	0.1				
17	62.9-65.3	0.1	<0.1	6.5	27.2	34.8	
		0.4	0.2				

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CORE ANALYSIS RESULTS

Company	Shell Oil Company	Formation	Desert Creek	File	RP-3-999
Well	Ratherford 32 - 13	Core Type	Diamond Conv.	Date Report	6/2/59
Field	Ratherford	Drilling Unit	Black Magic	Analysts	English
County	San Juan State Utah	Elev.	4652 KB	Location	Sec13 41S 23E

Lithological Abbreviations

SAND-SD SHALE-SH LIME-LM	DOLOMITE-DOL CHERT-CH GYPSUM-GYP	ANHYDRITE-ANHY CONGLOMERATE-CONG FOSSILIFEROUS-FOSS	SANDY-SNDY SHALY-SHLY LIMY-LMY	FINE-FN MEDIUM-MED COARSE-CSE	CRYSTALLINE-XLN GRAIN-GRN GRANULAR-GRNL	BROWN-BRN GRAY-GY UGGY-VGY	FRACTURED-FRAC LAMINATION-LAM STYLOLITIC-STY	SLIGHTLY-SL/ VERY-V/ WITH-W/
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SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCY'S	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
				OIL	TOTAL WATER	
18	5465.3-67.8	Max.	90	8.8	40.0	18.0
			<0.1			
			1.5			
19	67.8-70.0		0.3	7.4	30.7	28.0
			<0.1			
			0.1			
20	5470-73.0		*7.8	0.7	22.7	46.9
			2.0			
			<0.1			
		0.1	<0.1			
		0.1	<0.1			

* Stylolite
 ** Broken core

Service # 8 No Interpretation of results .

Permeabilities were ran one sample per foot

CORE ANALYSIS RESULTS

Company	Shell Oil Company	Formation	Desert Creek	File	RP-3-999
Well	Ratherford 32-13	Core Type	Diamond Conv.	Date Report	6/5/59
Field	Ratherford	Drilling Fluid	Black Magic	Analysts	English
County	San Juan	State	Utah	Elev.	4652 KB Location
					Sec13 41S 23E

Lithological Abbreviations

SANDY SHALE-LSH LIME-LSH	COLORED CHERT-LSH GYPSUM-LSH	ANHYDRITE-ANHYD CONGLOMERATE-CONG FOSSILIFEROUS-FOSS	SANDY-LSH SHALY-LSH SILTY-LSH	FINE-LSH MEDIUM-MED COARSE-LSH	CRYSTALLINE-LEN GRAIN-LEN IRREGULAR-GRN	BROWN-BRN GRAY-GRY MUGGY-VGY	FRACTURE-FRACT LAMINATION-LAM STYCOLITIC-STY	SLIGHTLY-SL/ VERY-V/ WITH-W
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SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCS		POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
		Max.	90°		OIL	TOTAL WATER	
21	5473.0-74.5	<0.1	<0.1	0.8	30.4	49.3	
		<0.1	<0.1				
22	74.7-76.4	0.3	<0.1	0.8	34.6	49.5	
		<0.1	<0.1				
23	76.7-78.4	<0.1	<0.1	1.5	19.7	69.5	
		<0.1	<0.1				
24	78.7-80.3	<0.1	<0.1	1.8	34.3	48.1	
		<0.1	<0.1				
25	80.6-82.4	<0.1	<0.1	2.7	10.7	77.6	
		<0.1	<0.1				
26	82.7-84.5	0.1	<0.1	0.9	22.1	26.8	
		<0.1	<0.1				
27	84.8-86.3	<0.1	<0.1	1.2	23.1	47.9	
28	86.7-88.4	<0.1	<0.1	2.1	8.9	79.0	
		<0.1	<0.1				
29	88.7-90.3	<0.1	<0.1	3.0	9.1	80.1	
		<0.1	<0.1				
30	90.7-92.3	<0.1	<0.1	1.8	10.9	78.3	
31	92.6-94.2	0.2	0.1	0.6	16.7	61.6	
		<0.1	<0.1				
32	94.5-96.3	*	*	0.8	30.0	35.0	
33	96.6-98.2	<0.1	<0.1	2.1	9.7	74.4	
		*	*				
34	98.6-5500.3	<0.1	<0.1	11.8	20.6	39.0	
		0.2	0.2				
35	5500.7-02.4	0.1	0.1	13.6	21.0	35.2	
		0.1	0.1				
36	02.7-04.3	0.4	0.2	7.0	8.8	68.3	
		<0.1	<0.1				
37	04.6-06.4	<0.1	<0.1	10.6	10.8	66.3	
		<0.1	<0.1				
38	06.7-08.4	0.1	<0.1	6.0	6.3	63.4	
39		0.1	<0.1				
39	08.7-10.3	<0.1	<0.1	3.4	7.6	69.4	
		<0.1	<0.1				
40	10.7-12.2	<0.1	<0.1	0.9	19.6	33.2	
		0.2	<0.1				
41	12.5-14.5	<0.1	<0.1	0.8	29.4	21.3	
		<0.1	<0.1				
42	5514.7-16.5	*	*	0.8	23.1	46.2	
		*	*				

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CORE ANALYSIS RESULTS

Company	Shell Oil Company	Formation	Desert Creek	File	RP-3-999
Well	Ratherford 32 - 13	Core Type	Diamond Conv.	Date Report	6/5/59
Field	Ratherford	Drilling Fluid	Black Magic	Analysis	English
County	San Juan State Utah	Elev	4652 KB	Location	Sec13 41S 23E

Lithological Abbreviations

SAND SD SHALE SH LIME LM	COLOMITE COI CHEPT CH GYPSUM GYP	ANHYDRITE ANHY CONGLOMERATE CONC FOSSILIFEROUS FOS	HANDY SDY SHALY SHY M M MMY	FINE FN MEDIUM MEI COARSE CSI	CRYSTALLINE XEN GRAIN GRN GRANULAR GRNL	BROWN BBN GRAY GY ZUGGY ZGY	FRACTURED FRAC LAMINATION LAM STYOLITIC STY	SLIGHTLY SL/ VERY V WITH W
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SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCY'S Max.	POROSITY PERCENT 90	RESIDUAL SATURATION PER CENT POPE		SAMPLE DESCRIPTION AND REMARKS
				OIL	TOTAL WATER	
43	5516.7-18.2	*	*	0.6	0.0	24.2
44	18.5-20.3	0.1	0.1	3.7	0.0	85.0
45	20.6-23.0	0.1	0.1	6.0	0.0	92.1

SERVICE # 8 No Interpretation of Results

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CORE ANALYSIS RESULTS

Company	Shell Oil Company	Formation	Desert Creek	File	RP-3-999
Well	Ratherford 32-13	Core Type	Diamond Conv.	Date Report	6/6/59
Field	Ratherford	Drilling Fluid	Black Magic	Analysts	English
County	San Juan State Utah	Elev.	4652 KB	Location	Sec13 41S 23E

Lithological Abbreviations

SAND ST SHALE SH LIME LM	DOLOMITE DO. CHERT CH GYPSUM GYP	ANHYDRITE ANHY CONGLOMERATE CONC. FOSSILIFEROUS FOSS	SANDY SDY SHALY SHY LIMY LMY	FINE FN MEDIUM MED COARSE CSE	CRYSTALLINE XEN GRAIN GRN GRANULAR GRNL	BROWN BKN GRAY GY MUGGY VGY	FRACTURED FRAC LAMINATED LAM STYOLITIC STY	SLIGHTLY SL/ VERY V. WITH W.
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SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYS		POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
		Max.	90°		OIL	TOTAL WATER	
46	5523.5-25.0	<0.1	Δ 0.1	2.6	8.6	70.7	
47	25.0-28.3	0.1	Δ 0.1	3.4	12.9	64.6	
		<0.1	Δ 0.1				
		13	1.1				
48	28.3-31.0	<0.1	Δ 0.1	3.6	11.2	65.8	
		<0.1	Δ 0.1				
		1.7	Δ 0.1				
49	31.0-33.4	<0.1	Δ 0.1	3.2	12.2	64.6	
		<0.1	Δ 0.1				
50	33.4-36.0	1.2	0.2	10.5	37.0	26.3	
		23	14				
		1.2	0.3				
51	36.0-38.5	2.2	1.9	9.7	31.9	22.4	
		25	10				
		3.8	0.9				
52	38.5-41.0	6.6	1.7	8.9	28.5	23.2	
		15	10				
53	41.0-43.4	36	23	6.2	23.7	23.5	
		2.2	1.7				
		1.9	1.7				
54	43.4-46.0	2.3	0.8	5.3	21.1	21.1	
		0.6	0.4				
55	46.0-48.4	1.9	1.7	2.7	15.3	40.6	
		Δ 0.1	Δ 0.1				
56	48.4-50.5	Δ 0.1	Δ 0.1	1.8	9.1	54.5	
		0.5	0.1				
		0.1	Δ 0.1				
57	50.5-53.2	Δ 0.1	Δ 0.1	6.9	4.9	70.6	
		0.1	Δ 0.1				
58	53.2-56.0	Δ 0.1	Δ 0.1	10.4	25.1	44.4	
		0.5	0.3				
		2.0	0.7				
59	56.0-58.3	5.0	3.7	10.8	33.8	26.1	
		*	*				
60	58.3-61.0	Δ 0.1	Δ 0.1	7.0	19.0	46.7	
		0.1	Δ 0.1				
		0.8	0.6				
61	61.0-63.4	0.1	Δ 0.1	3.4	10.2	45.6	
		0.1	Δ 0.1				
62	5563.4-65.0	0.1	Δ 0.1	3.0	11.0	47.9	
		0.1	Δ 0.1				

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

CORE ANALYSIS RESULTS

Company Shell Oil Company Formation Desert Creek File RP-3-999
 Well Ratherford 32-13 Core Type Diamond Conv. Date Report 6/6/59
 Field Ratherford Drilling Fluid Black Magic Analysts English
 County San Juan State Utah Elev. 4652 KB Location Sec13 41S 23E

Lithological Abbreviations

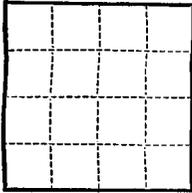
SAND SD SHALE SH LIME LM	DOLOMITE DO CHERT CH GYPSUM GYP	ANHYDRITE ANHY CONGLOMERATE CONG FOSSILIFEROUS FOSS	SANDY SDY SHALY SHY LIMY LMY	FINE FN MEDIUM MED COARSE CSE	CRYSTALLINE XLN GRAIN GRN GRANULAR GHNL	BROWN BRN GRAY GY VUGGY VGY	FRACTURED FRAC LAMINATION LAM STYOLITIC STY	SLIGHTLY SL/ VERY V/ WITH W/
--------------------------------	---------------------------------------	---	------------------------------------	-------------------------------------	---	-----------------------------------	---	------------------------------------

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCS Max.	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE			SAMPLE DESCRIPTION AND REMARKS
				OIL	TOTAL	WATER	
63	5565.0-68.0	0.1	<0.1	9.1	26.8	42.1	
		0.1	<0.1				
		0.4	0.1				
64	68.0-71.0	0.1	<0.1	7.4	15.4	43.1	
		0.1	<0.1				
		0.7	0.5				
65	71.0-73.5	0.1	<0.1	4.4	0.7	40.3	
		0.1	<0.1				
66	73.5-76.2	0.1	<0.1	8.5	6.5	81.2	
		0.1	<0.1				
		0.1	<0.1				
67	76.2-78.0	0.1	<0.1	4.3	7.2	85.6	
		0.1	<0.1				

SERVICE # 8 NO INTERPRETATION OF RESULTS

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

Form 9-331b
(April 1952)



Copy H. L. E

Budget Bureau No. 42-R350.4
Approval expires 12-31-60.

(SUBMIT IN TRIPLICATE)

Indian Agency Navajo

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Allottee Tribal

Lease No. 14-20-603-267

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 REPAIR ACIDIZE	<input checked="" type="checkbox"/>	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)

D. L. E
Cortes, Colorado March 14, 1960
Rutherford Unit (Formerly Shell Oil Co. North Desert Creek #32-13)

Well No. 13-32 is located 1000 ft. from N line and 1979 ft. from E line of sec. 13

<u>NE</u>	<u>13</u>	<u>41S</u>	<u>23E</u>	<u>S1EM</u>
(1/4 Sec. and Sec. No.)	(Twp.)	(Range)	(Meridian)	
<u>Greater Anoth</u>	<u>San Juan</u>	<u>Utah</u>		
(Field)	(County or Subdivision)	(State or Territory)		

The elevation of the ~~surface~~ 4639 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)

Pull tubing and packer, run 7" Baker Retrievmatic packer to 5400' with 180' tubing stinger on bottom. Attempt to reverse out oil base mud below packer. Set packer at 5400' and acidize Desert Creek open hole from 5421-5588' with 5000 gallons regular 15% HCL acid. Injection rate 2-3 BPM. Swab or flow spent acid and clean well. Pull tubing and packer, rerun 2 1/2" tubing to 5580' with Baker tubing anchor set at 5375', rods and place on pump. This well has been shut down since unitisation.

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

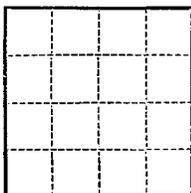
Company PHILLIPS PETROLEUM COMPANY

Address P. O. Drawer 1150

Cortes, Colorado

By *C. M. Boles*
C. M. Boles

Title District Superintendent



Copy H. R. C.

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Form approved.
Budget Bureau No. 42-R359.4.

Indian Agency Navajo

Allottee Tribal

Lease No. 14-20-603-247

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 ABANDONMENT ACIDIZING	<input checked="" type="checkbox"/>
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)

Cortez, Colorado **April 4**, 19 **63**
Rutherford Unit (Formerly Shell Oil Co. North Desert Creek #32-13)
 Well No. **13-32** is located **1881** ft. from **[N]** line and **1979** ft. from **[E]** line of sec. **13**
NE 13 41S 29E S1EM
(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 ~~surface~~ ~~floor~~ above sea level is **4639** 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)

3-18-63 Pulled tubing, reran tubing with packer, reversed out **Black Magic Mat.** Acidized **Desert Creek** open hole **5421-5588'** with **5000** gallons **15%** acid. Placed well on pump and put to producing. Job completed **3-21-63**.

Previous Production: **Greater Aneth - Desert Creek zone of Paradox - shut down - Shell test well - not produced.**

Present Production: **Greater Aneth - Desert Creek zone of Paradox - 88 BO, 296 MCF gas, 3 BW.**

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. H. Boles*
C. H. Boles
 Title District Superintendent



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

June 8, 1964

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 Ratherford Unit in San Juan County, Utah, were converted to water injection wells.

<u>Old Well No.</u>	<u>New Well No.</u>	<u>Date Converted</u>	<u>Injection Rate</u>	<u>Injection Pressure</u>
19-43	19W43	6-1-64	648 BHPD	Vacuum
13-32	13W32	6-3-64	603 BHPD	Vacuum

Very truly yours,

PHILLIPS PETROLEUM COMPANY

C. M. Boles

C. M. Boles
Area Superintendent

bh

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIP... (TE*)
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.
11-20-603-247

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
Navajo Tribe

7. UNIT AGREEMENT NAME
34-I-4192

8. FARM OR LEASE NAME
Ratherford Unit

9. WELL NO.
13W32

10. FIELD AND POOL, OR WILDCAT
Greater Aneth

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
13-41S-23E, SLBM

12. COUNTY OR ~~ZONE~~
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 Well**

2. NAME OF OPERATOR
Phillips Petroleum Company

3. ADDRESS OF OPERATOR
P. O. 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
1831' from North Line, 1979' from East Line Sec 13 NE/4 Sec. 13

14. PERMIT NO.
4639 CR

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
4639 CR

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

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

(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.)*

Pulled rods and tubing, steam cleaned and reran 2-1/2" tubing with Marlex Liner and Baker Pension Packer. Hooked up for Water Injection, started injecting water 6-3-64. Changed well classification from Oil Well to Water Injection Well and Well Number from 13-32 to 13W32 effective 6-3-64.

**Previous Production from Greater Aneth Field, Paradox Formation, Desert Creek Zones
46 BOPD, 92 MOPGD, 1 BOPD**

Present Injection Rate: 603 BOPD on Vacuum through 19/64" choke.

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

SIGNED *C. H. Boies* TITLE Area Superintendent DATE 6-23-64

(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 TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

~~11-20-603-247~~

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo Tribe

7. UNIT AGREEMENT NAME

SW-I-4192

8. FARM OR LEASE NAME

Ratherford Unit

9. WELL NO.

13W32

10. FIELD AND POOL, OR WILDCAT

Greater Aneth

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

13-419-23E, S1EM

12. COUNTY OR TERRITORY

San Juan

13. STATE

Utah

1. OIL WELL GAS WELL OTHER Water Injection Well

2. NAME OF OPERATOR

Shell Oil Co
Phillips Petroleum Company

3. ADDRESS OF OPERATOR

P. O. 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

1881' from North Line, 1979' from East Line Sec 13
NE/4 Sec. 13

14. PERMIT NO.

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

4639 GR

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) Convert well to Water Injection

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.)*

Pulled rods and tubing, steam cleaned and reran 2-1/2" tubing with Marlex Liner and Baker Tension Packer. Hooked up for Water Injection, started injecting water 6-3-64. Changed Well Classification from Oil Well to Water Injection Well and Well Number from 13-32 to 13W32 effective 6-3-64.

Previous Production from Greater Aneth Field, Paradox formation, Desert Creek Zone:
46 BOPD, 92 MCFD, 1 BWPD

Present Injection Rate: 603 BWPD on Vacuum through 19/64" choke.

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

SIGNED

C. H. Holes

TITLE

Area Superintendent

DATE

6-23-64

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

UNION STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

14-20-603-247

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo

SUNDRY NOTICES AND REPORTS ON WELLS

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

<p>1. OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> Water Injection well</p>	<p>7. UNIT AGREEMENT NAME SW-I-4192</p>
<p>2. NAME OF OPERATOR Phillips Petroleum Co.</p>	<p>8. FARM OR LEASE NAME Rutherford Unit</p>
<p>3. ADDRESS OF OPERATOR Drawer 1150, Cortez, Colorado</p>	<p>9. WELL NO. 1332</p>
<p>4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 1861' from North Line, 1979' from East Line, Sec. 13 NE/4</p>	<p>10. FIELD AND POOL, OR WILDCAT Greater Aneth</p>
<p>14. PERMIT NO.</p>	<p>15. ELEVATIONS (Show whether DF, RT, GR, etc.) 4639 GR</p>
<p>12. COUNTY OR ZONE</p>	<p>13. STATE</p>
<p>San Juan</p>	<p>Utah</p>

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	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"/>
REPAIR 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.)*

Acidize Water Injection well with 1000 gallons regular acid, 200 gallons Sol Block and 2000 gallons regular acid in attempt to increase water injection rate.

Present Injection Rate: 1130 BWPD @ 325#

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

SIGNED *C. H. Rolan* TITLE Area Superintendent DATE 11-19-64

(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 TRIPlicate*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

14-20-603-247

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo

7. UNIT AGREEMENT NAME

SW-1-4192

8. FARM OR LEASE NAME

Rutherford Unit

9. WELL NO.

1302

10. FIELD AND POOL, OR WILDCAT

Greater Aneth

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

13-416-23E, SLBM

12. COUNTY OR TERRITORY

San Juan

13. STATE

Utah

1. OIL WELL GAS WELL OTHER

Water Injection Well

2. NAME OF OPERATOR

Phillips Petroleum Company,

3. ADDRESS OF OPERATOR

Box 1150, Cortez, Colorado

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

1881' from North Line, 1979' from East Line, Sec. 13 NE/4

14. PERMIT NO.

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

4639 GR

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

~~ACIDIZING~~ 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 November 20, 1964 acidized water injection well with 1000 gallons 15% acid, 200 gallons Sol Block, and 1000 gallons acid. Resumed water injection.

Previous Injection Rate: 1130 BWPD at 325#.

Present Injection rate: 3212 BWPD on vacuum.

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

SIGNED

C. M. Boles

TITLE

Area Superintendent

DATE

11-24-64

(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 TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-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.)

<p>1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> Water Injection Well</p> <p>2. NAME OF OPERATOR Phillips Petroleum Co.</p> <p>3. ADDRESS OF OPERATOR Drawer 1150, Cortez, Colorado 81321</p> <p>4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 1881' FWL; 1979' FWL, Section 13 NE/4</p> <p>14. PERMIT NO.</p>	<p>5. LEASE DESIGNATION AND SERIAL NO. 14-20-683-247</p> <p>6. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo Tribal</p> <p>7. UNIT AGREEMENT NAME SH-1-4192</p> <p>8. FARM OR LEASE NAME Hubbards Unit</p> <p>9. WELL NO. 1342</p> <p>10. FIELD AND POOL, OR WILDCAT Greater Aneth</p> <p>11. SEC., T., R., M., OR BLM. AND SURVEY OR AREA 13-418-038 BLM</p> <p>12. COUNTY OR TERRITORY San Juan</p> <p>13. STATE Utah</p>
<p>15. ELEVATIONS (Show whether DF, RT, GR, etc.) 4639 GR</p>	

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

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

Acidize water injection well with 9000 gallons 15% acid. (Desert Creek Zone)

Present Injection Rate: 368 MCFD at 6109.

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

SIGNED *C.M. Boies* TITLE **District Superintendent** DATE **12-2-66**

(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 TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-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 <input checked="" type="checkbox"/> Water Injection Well		5. LEASE DESIGNATION AND SERIAL NO. 14-20-603-247
2. NAME OF OPERATOR Phillips Petroleum Co.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo Tribal
3. ADDRESS OF OPERATOR Drawer 1150, Cortez, Colorado 81321		7. UNIT AGREEMENT NAME SH-1-4192
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 1881' FWL; 1979' FBL, Section 13 NE/4		8. FARM OR LEASE NAME Rutherford Unit
14. PERMIT NO.	15. ELEVATIONS (Show whether DF, RT, GR, etc.) 4639 GR	9. WELL NO. 13W32
		10. FIELD AND POOL, OR WILDCAT Greater Anoth
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 13-418-23E S18N
		12. COUNTY OR TERRITORY 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 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.)*

Acidize water injection well with 5000 gallons 15% acid. (Desert Creek Zone)

Present Injection Rate: 368 BWPD at 610#.

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

SIGNED C. K. Holen TITLE **District Superintendent** DATE **12-2-66**

(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 1 ATE*
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 42-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 <input checked="" type="checkbox"/> Water Injection		5. LEASE DESIGNATION AND SERIAL NO. 14-20-603-217
2. NAME OF OPERATOR Phillips Petroleum Co.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo Tribal
3. ADDRESS OF OPERATOR Drawer 1150, Cortez, Colorado 81321		7. UNIT AGREEMENT NAME 60-1-1192
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 1881' FNL, 1979' FEL, Sec. 13 NE/4		8. FARM OR LEASE NAME Netherford Unit
14. PERMIT NO.		9. WELL NO. 15432
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 4639 GR		10. FIELD AND POOL, OR WILDCAT Greater Aneth
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 13-612-23E SLN
		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:

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

SUBSEQUENT REPORT OF:

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

On December 14, 1966 started to acidise well, packer came loose. Moved in well service unit, pulled tubing and packer, left packer element in hole. Ran Halliburton Type R-3 packer, set at 5400'. Acidized well with 5000 gallons 15% regular acid in two equal stages with 1000 gallons salt plug between stages. Resumed injection.

PREVIOUS INJECTION RATE: 368 BWPD at 610%.

PRESENT INJECTION RATE: 3613 B WPD on vacuum.

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

SIGNED C. M. Boles TITLE Dist. Supt. DATE 1-10-67

(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 THE MANNER INDICATED*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-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.)		5. LEASE DESIGNATION AND SERIAL NO. 14-20-603-247
1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> Water Injection		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Nevada Tribal
2. NAME OF OPERATOR Phillips Petroleum Co.		7. UNIT AGREEMENT NAME SW-1-4192
3. ADDRESS OF OPERATOR Drawer 1150, Cortes, Colorado 81321		8. FARM OR LEASE NAME Sutherland Unit
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 1601' FWL; 1979' FWL, Sec. 13 NE/4		9. WELL NO. 13W32
14. PERMIT NO.		10. FIELD AND POOL, OR WILDCAT Greater Aneth
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 4639 GR		11. SEC., T., R., M., OR BLEK. AND SURVEY OR AREA 13-413-23E SLUM
		12. COUNTY OR PARISH 13. STATE San Juan 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 checked="" type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) _____	
(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 December 14, 1966 started to acidize well, packer came loose. Moved in well service unit, pulled tubing and packer, left packer element in hole. Ran Malliburton Type B-3 packer, set at 5400'. Acidized well with 5000 gallons 15% regular acid in two equal stages with 1000 gallons salt plug between stages. Resumed injection.

PREVIOUS INJECTION RATE: 360 BWPD at 610%.

PRESENT INJECTION RATE: 3613 B WPD on vacuum.

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

SIGNED **C. N. Bolus** TITLE **Dist. Supt.** DATE **1-10-67**

(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 13W32 WELL
SEC. 13 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>13W32</u>	Field <u>Greater Aneth</u>	County <u>San Juan</u>
Location of Enhanced Recovery Injection or Disposal Well <u>13W32</u> Sec. <u>13</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 <u>Wingate</u> Fresh Water Within 1/2 Mile <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 <u>Oil & Gas</u>	
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>5421</u> to <u>5588</u>		
a. Top of the Perforated Interval: <u>5421</u>	b. Base of Fresh Water: <u>1550'</u>	c. Intervening Thickness (a minus b) <u>3871</u>	
Is the intervening thickness sufficient to show fresh water will be protected without additional data? YES NO <u>See Attachment #4</u>			
Lithology of Intervening Zones <u>See Attachment #1</u>			
Injection Rates and Pressures Maximum _____ B/D <u>SD 4-25-80</u> _____ 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.

Suscribed and sworn to before me this 21st day of Sept, 19 83

SEAL

My commission expires

DONALD L. HUDSON - Notary Public
County of Natrona State of Wyoming
My Commission Expires Nov 3, 1986

Donald L. Hudson

Notary Public in and for Natrona Co., Wyoming

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	16	76	125	Surface	Returns
Intermediate	10 3/4	1378	200	Surface	Returns
Production	7	5421	200	4830	CALCULATED
Tubing	2 1/2	5400	Name - Type - Depth of Tubing Packer Halliburton Type R-3 PKR 5400		
Total Depth 5588	Geologic Name - Inj. Zone Desert Creek		Depth - Top of Inj. Interval 5421	Depth - Base of Inj. Interval 5588	

(To be filed within 30 days after drilling is completed) 14-20-603- 247

DEPARTMENT OF NATURAL RESOURCES AND ENERGY

LEASE NO.

API NO. 43-037-16 406

640 Acres
N

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

COUNTY San Juan SEC. 13 TWP. 41S RGE. 23E

COMPANY OPERATING Phillips Petroleum Company

OFFICE ADDRESS P.O. Box 2920

TOWN Casper STATE WY ZIP 82602

FARM NAME --- WELL NO. 13W32

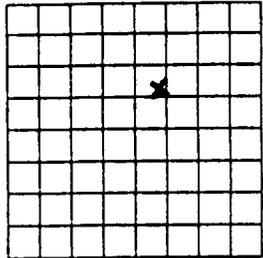
DRILLING STARTED 5.8 19 59 DRILLING FINISHED 6-13 19 59

DATE OF FIRST PRODUCTION --- COMPLETED 6-14-59

WELL LOCATED SW $\frac{1}{4}$ NE $\frac{1}{4}$ ---

1881 FT. FROM XX OF $\frac{1}{4}$ SEC. & 1979 FT. FROM EL OF $\frac{1}{4}$ SEC.

ELEVATION RICKS FLOOR 4652 GROUND 4639



Locate Well Correctly
and Outline Lease

RKB

TYPE COMPLETION

Single Zone ---

Multiple Zone X

Comingled ---

LOCATION EXCEPTION

OIL OR GAS ZONES

Name	From	To	Name	From	To
Desert Creek	5421	5588			

CASING & CEMENT

Casing Set				Csg. Test	Cement		
Size	Wgt.	Grade	Feet	Psi	Sax	Fillup	Top
16	42	H-40	76	No Test	125		Surface
10 3/4	32	J-55	1378	700	200		Surface
7	23	J-55	5421	1500	200	590	4830

TOTAL DEPTH 5588

PACKERS SET
DEPTH Halliburton Type R-3 PKR at 5400'

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

FORMATION	<u>Desert Creek INT</u>		
SPACING & SPACING ORDER NO.	<u>40 acre</u>		
	<u>Cause #C-3(B)</u>		
CLASSIFICATION (DISPOSAL WELL, ENHANCED RECOVERY, LP GAS STORAGE)	<u>Enhanced Recovery</u>		
PERFORATED	<u>Open Hole</u>		
	<u>5421-5588</u>		
INTERVALS			
ACIDIZED?	<u>12-14-66</u>		
	<u>5000 gal. 15%</u>		
	<u>Regular Acid</u>		
FRACTURE TREATED?	<u>No</u>		

INITIAL TEST DATA

Converted to Injector

Date	<u>6.3.64</u>		
Oil, bbl./day	<u>--</u>		
Oil Gravity	<u>--</u>		
Gas, Cu. Ft./day	<u>--</u>	<u>CF</u>	<u>CF</u>
Gas-Oil Ratio Cu. Ft./Bbl.	<u>--</u>		
Water-Bbl./day	<u>603</u>		
Pumping or Flowing	<u>flowing</u>		
CHOKE SIZE	<u>19/64</u>		
FLOW TUBING PRESSURE	<u>Vacuum</u>		

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 _____

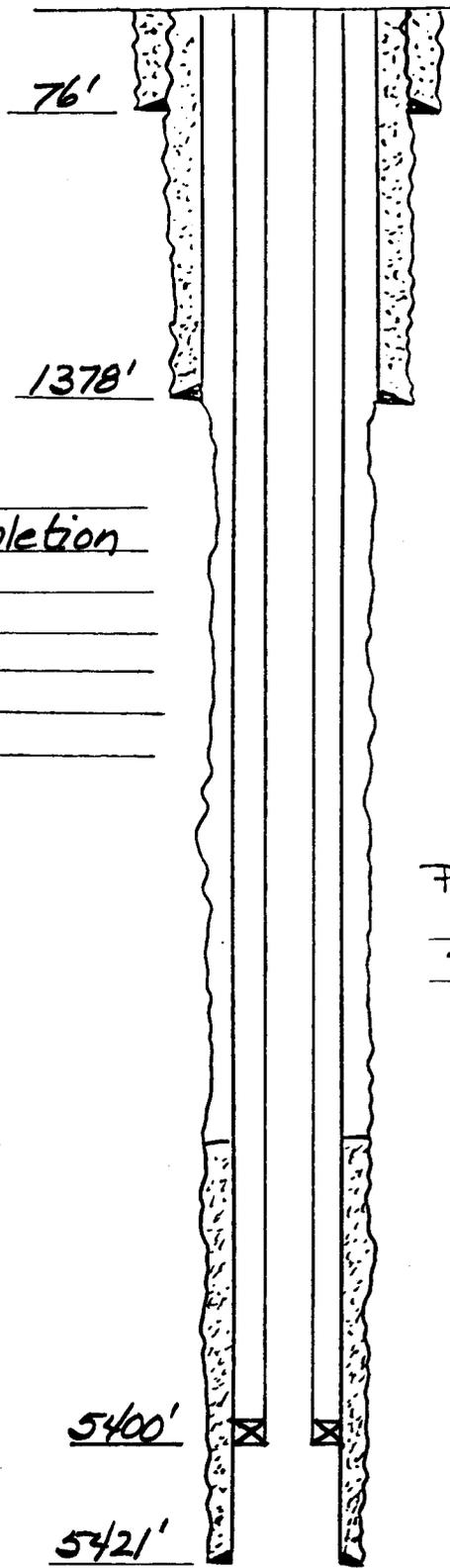
SEP 29 1963

Casper

WELL: 13W32
LOCATION: SWNE Sec 17 T41S-R23E
FIELD: GREATER ANETH
RESERVOIR: Desert Creek I+II

W. COMPLETION: 6.3.64
PRESENT STATUS: S.I.

RKB 4652'
GL 4639'



SURFACE CASING: 16" 42# H-40

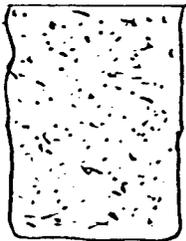
INTERMEDIATE CASING: 10 3/4" 32# J-55

PRODUCTION CASING: 7" 23# J-55

PERFORATIONS: open hole completion
5421-5588

PACKER: Halliburton type
R-3 Pkr @ 5400'
Tubing: 2 1/2" @ 5400'

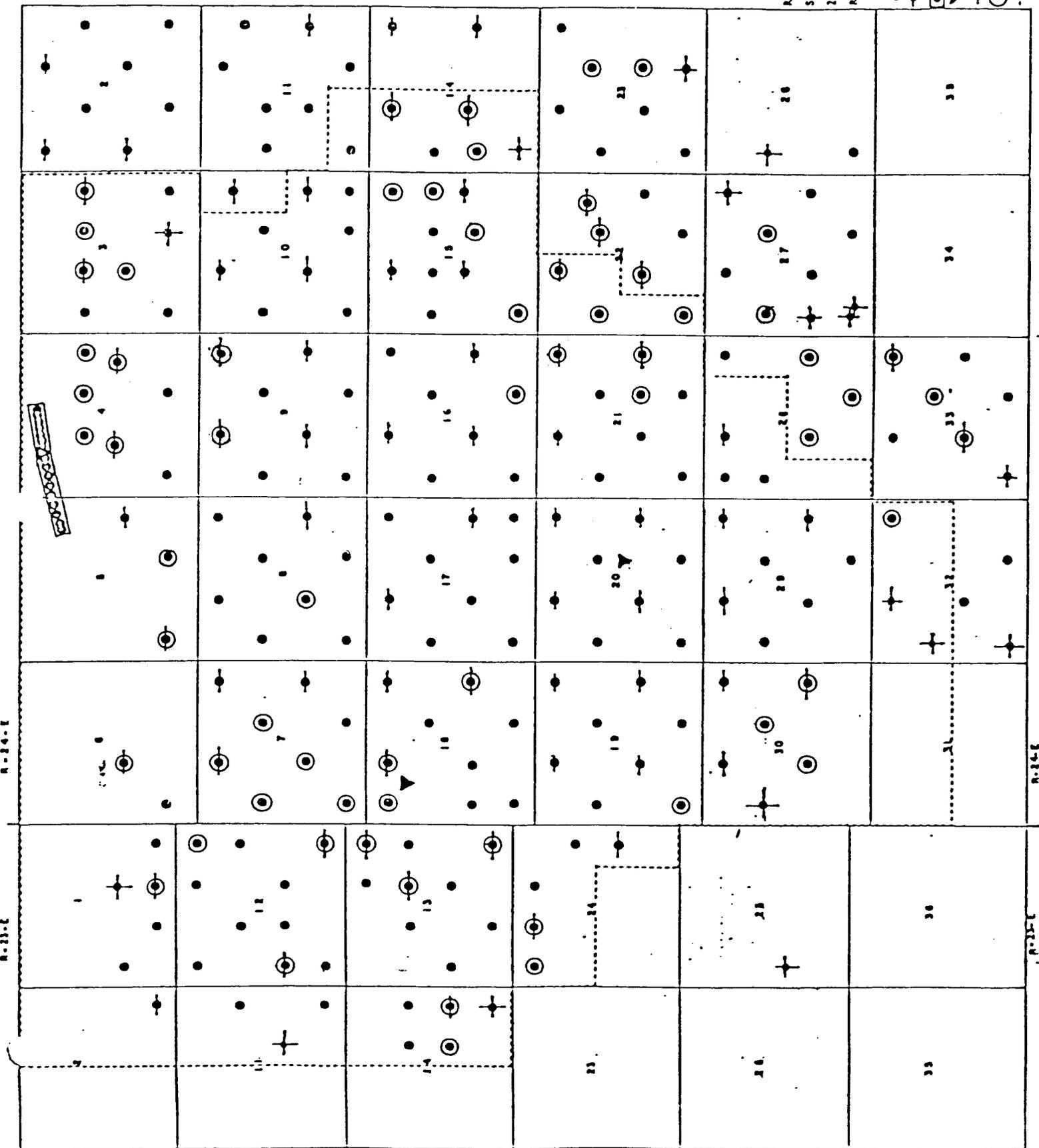
PBTD: _____
OTD: 5588'



Phillips Petroleum Company

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



R-24-1

R-23-1

R-24-1

R-25-1

CLI-12A (REV. 1964)

CHEMICAL & GEOLOGICAL LABORATORIES

P. O. Box 2794
Casper, Wyoming

WATER ANALYSIS REPORT

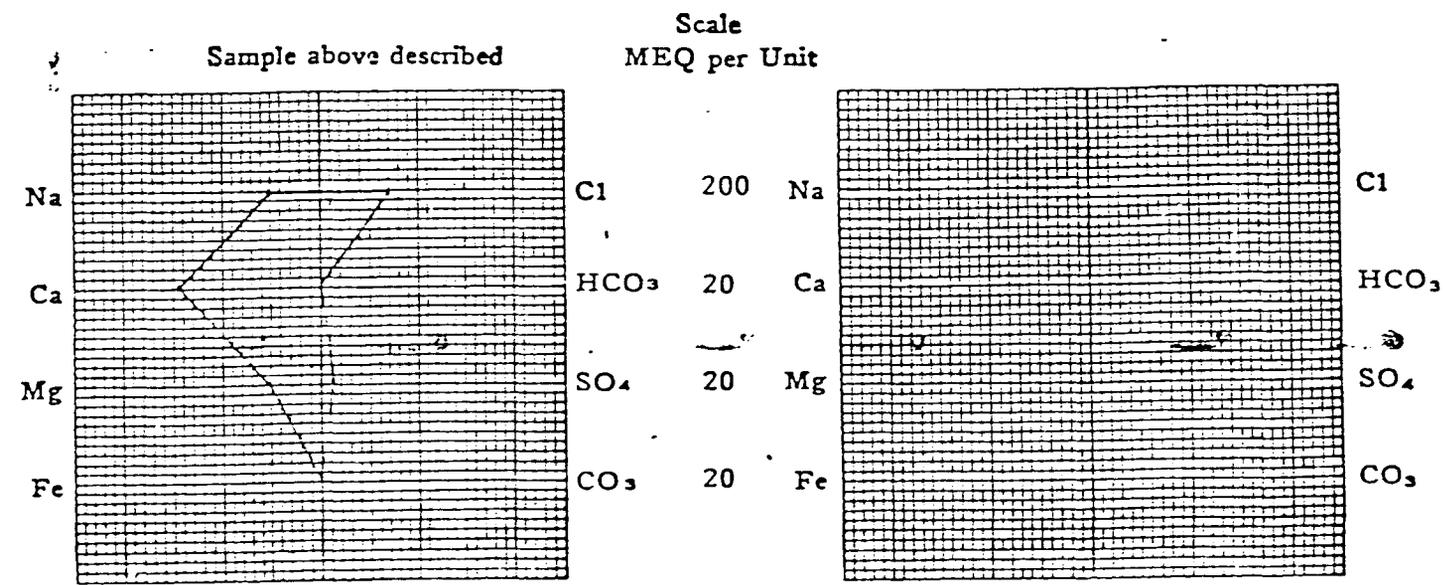
OPERATOR Phillips Petroleum Co. DATE 5-27-83 LAB NO. W30480
 WELL NO. Rutherford Unit LOCATION _____
 FIELD _____ FORMATION _____
 COUNTY San Juan INTERVAL _____
 STATE Utah SAMPLE FROM _____

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

CHECKLIST FOR INJECTION WELL APPLICATION AND FILE REVIEW

Operator: Phillys Well No. Rutherford Unit 9 13W32
 County: San Juan T 41S R 23E Sec. 13 API# 43-037-16406
 New Well Conversion Disposal Well Enhanced Recovery Well

	YES	NO
UIC Forms Completed	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Plat including Surface Owners, Leaseholders, and wells of available record	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schematic Diagram	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fracture Information	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pressure and Rate Control	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Adequate Geologic Information	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Fluid Source Desert Creek

Analysis of Injection Fluid	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	TDS <u>856.55</u>
Analysis of Water in Formation to be injected into	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	TDS <u>103633</u>

Known USDW in area Wingate Depth 1550

Number of wells in area of review 5 Prod. 4 P&A 0
 Water 0 Inj. 1

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

Comments: TOC 4830

Reviewed by: *[Signature]*

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

OPERATOR: Phillips Petroleum Company

FIELD: Greater Aneth LEASE: Ratherford Unit

WELL # 13W32 SEC. 13 TOWNSHIP 41S RANGE 23E

STATE (FED.) FEE DEPTH 5588 TYPE WELL INJ W MAX. INJ. PRESS. _____

SD 4/25/80

TEST DATE 6/17/84

CASING STRING	SIZE	SET AT	CMT	PRESSURE READINGS	REMARKS	FUTURE
<u>SURFACE</u>	<u>16</u>	<u>76'</u>	<u>125</u>		<u>SE</u>	
<u>INTERMEDIATE</u>	<u>10³/₄</u>	<u>1378'</u>	<u>200</u>			
<u>PRODUCTION</u>	<u>7</u>	<u>5421'</u>	<u>200</u>			
<u>TUBING</u>	<u>2¹/₂</u>	<u>5400'</u>				
<u>Halliburton Type R-3 Pkr at 5400'</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>						

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND AND MANAGEMENT

SUBMIT IN TRIPLICATE
(Other instructions on re-
verse side)

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.)

OIL WELL GAS WELL OTHER

Conversion

RECEIVED

JUN 10 1985

DIVISION OF OIL
GAS & MINING

1. NAME OF OPERATOR

Phillips Oil Company

2. ADDRESS OF OPERATOR

P.O. Box 2920, Casper, WY 82602

3. LOCATION OF WELL (Report location clearly and in accordance with any Division of Oil Gas & Mining instructions. See also space 17 below.)
At surface

1881' FNL, 1979' FEL, SWNE

10. PERMIT NO.

43-037-16406

15. ELEVATIONS (Show whether DT, ST, OR, etc.)

4652' RKB

4. LEASE IDENTIFICATION AND SERIAL NO.
14-20-603-247

5. IF WELLS ALLOCATED ON TRACT NAME
Navajo

6. SURF ACQUISITION NAME

SW-I-4192

7. NAME ON LEASE NAME

Ratherford Unit

8. WELL NO.

13W32

9. FIELD AND POOL, OR WILDCAT

Greater Aneth

11. SEC., T., R., N., OR S.E. AND SUBST OR AREA

Sec 13-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

PLUG OR ALTER CASING

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREAT

MULTIPLE COMPLETE

FRACTURE TREATMENT

ALTERING CASING

SHOOT OR ACIDIZE

ABANDON*

SHOOTING OR ACIDIZING

ABANDONMENT*

REPAIR WELL

CHANGE PLANS

(Other) _____

(Other) 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 zones pertinent to this work.)

It is proposed to convert Ratherford Unit #13W32 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 5300 gallons 28% HCL.

Federal approval of this action
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

DATE: 7/1/85
BY: John R. Bynum

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

SIGNED

E. Stuart

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

14-20-603-247A

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		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo	
2. NAME OF OPERATOR Phillips Petroleum Company		7. WELL ASSIGNMENT NAME SW-I-4192	
3. ADDRESS OF OPERATOR P.O. Box 2920, Casper, WY 82602		8. FARM OR LEASE NAME Ratherford Unit	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 1881' FNL, 1979' FEL (SW NE)		9. WELL NO. 13W32	
14. PERMIT NO. 43-037-16406		15. ELEVATIONS (Show whether SF, ST, CR, etc.) 4652' RKB	
		10. FIELD AND POOL, OR WILDCAT Greater Aneth	11. SEC., T., R., N., OR BLK. AND SUBSTY OR AREA Sec. 13-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) _____
(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 #13W32, 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 6200 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 06 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 _____ ACCEPTED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING

CONDITIONS OF APPROVAL, IF ANY:

Federal approval of this action is required before commencing operations.

*See Instructions on Reverse Side DATE: 11-13-86 BY: John P. B...

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)

Expires August 31, 1985

1. LEASE DESIGNATION AND SERIAL NO.

14-20-603-247A 7

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

NAVAJO

7. UNIT AGREEMENT NAME

SW-I-4192

8. FARM OR LEASE NAME

Ratherford Unit

9. WELL NO.

13-32

10. FIELD AND POOL, OR WILDCAT

Greater Aneth

11. SEC., T., R., E., OR BLK. AND SUBST. OR AREA

Sec. 13-T41S-R23E

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

2. NAME OF OPERATOR
Phillips Petroleum 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

1881' FNL, 1979' FEL SW NE

API# 43-037-16406

14. PERMIT NO.

15. ELEVATIONS (Show whether SP, ST, OR, etc.)

4652' 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
(Other)

PULL OR ALTER CASING
MULTIPLE COMPLETS
ABANDON*
CHANGE PLANE

SUBSEQUENT REPORT OF:

WATER SHUT-OFF
FRACTURE TREATMENT
SHOOTING OR ACIDIZING
(Other) Convert to Producing well

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.)*

Dec. 23, 1986 through Jan. 8, 1987

MI & RU 12/23/86. COOH w/pkr and tbg. COOH to 5579'. Test for csg leaks- none. Set Cal-Seal across Zone II. TOC @ 5540'. New PBSD at 5527'. Acidized Zone I open hole 5421-5516' w/6500 gal 28% HCL. Swabbed back load. TIH w/tbg. Set AC @ 5347'. TIH w/rods. Convert to a pumping oil well. Started Pumping 2/2/87.

Injection Before shut-in
Production After 2 BOPD 89 BWPD

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AUG 4 1987

DIVISION OF OIL
GAS & MINING

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

SUBMIT IN TRIPL
(Other instructions
verse side)

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. 14-20-603-247	
2. NAME OF OPERATOR Phillips Petroleum Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo	
3. ADDRESS OF OPERATOR P. O. Box 1150, Cortez, CO 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 1881' FNL & 1979' FEL		8. FARM OR LEASE NAME Ratherford Unit	
14. PERMIT NO. 43-037-16406		9. WELL NO. #13-32	
15. ELEVATIONS (Show whether DF, RT, OR, etc.) 4652' RKB		10. FIELD AND POOL, OR WILDCAT Greater Aneth	
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 13, T41S, R23E	
		12. COUNTY OR PARISH San Juan	13. STATE Utah

RECEIVED
MAY 27 1988

DIVISION OF
OIL, GAS & MINING

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

NOTICE OF INTENTION TO:

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

SUBSEQUENT REPORT OF:

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

March 25, 1988 through April 12, 1988

Move in and rig up Well Service unit 3/25/88. POOH with rods and pump. Release tubing anchor, POOH with production tubing. Swab well. Circulate well and add tubing. Did not tag until 5568'. Circulate to clean hole. Mix and pump 20 sacks cement. Tag at 5544' Pump 25 sacks cement. Tag cement at 5465'. Drilled out cement to 5495'. POOH/RIH with dump bailer, dump 150# Hydromite at 5495' to 5474'. Tag Hydromite at 5474'. POOH. Swab well to recover load. POOH. RIH with production tubing, set anchor at 5386'. S.N. @ 5418. RIH with rods & pump. Return well to production. Rig down and move off Well Service unit 4/11/88.

Production Before - 0 BOPD, 80 BWPD
Production After - 0 BOPD, 67 BWPD

- | | |
|---------------------------------|------------------|
| 4 - BLM | 1 - Chieftain |
| 2 - Utah O & G | 1 - Mobil Oil |
| 1 - M. Williams, Bartlesville | 1 - Texaco, Inc. |
| 1 - R. J. Rundt (r) Engineering | 1 - Chevron, USA |
| 1 - D. C. Gill (r) Denver Files | |
| 1 - Cortez Office - RC | |

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

SIGNED J. Reno TITLE District Superintendent DATE 5/18/88

(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.

SUBMIT IN TRIPLICATE

RECEIVED
AUG 03 1992

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)
 1881' FNL & 1979' FEL
 Section 13, T41S, R23E

5. Lease Designation and Serial No.
 14-20-603-247-A

6. If Indian, Allottee or Tribe Name
 Navajo Tribal

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

8. Well Name and No.
 Rutherford Unit #13-32

9. API Well No.
 43-037-16406

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 checked="" type="checkbox"/> Subsequent Report <input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Abandonment <input type="checkbox"/> Recompletion <input type="checkbox"/> Plugging Back <input type="checkbox"/> Casing Repair <input type="checkbox"/> Altering Casing <input checked="" type="checkbox"/> Other Underream & Test Prod.
	<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 <small>(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)</small>

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.)*

7-13-92 thru 7-21-92
 MI & RU Montezuma WS Rig #31. Opened well to frac tank. MI & RU D/S pmp truck. Attempted to kill well. SI pressure stabilized @ 400 psi. Bled well down. ND WH and NU BOP. COOH w/production tbg. Cleaned out iron sulfide to PBDT @ 5474'. Underreamed open hole section to 8-1/2" FR/5434'-5474'. POOH w/hole opener & RIH w/prod. tbg assy. ND BOP and ran in hole w/LTV pump No. 453 (RHBC) and production string. Spaced out pump. RD and moved off. Left well SI WO electrical hook-up.

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

Signed *P. Robinson* Title Sr. Drlg. & Prod. Engr. Date 7-30-92
(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

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 API Number	Entity	Location	Producing Zone	Well Status	Days Oper	Production Volumes		
						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 Rutherford 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

MONTHLY REPORT OF ENHANCED RECOVERY PROJECT - PART 2 Page 2

040805

MONTHLY MONITORING OF INJECTION WELLS

<u>Well Name</u>	<u>Inl. Press.</u>	<u>Inl. Rate</u>	<u>Annulus Press.</u>	<u>Monthly Inl. Vol.</u>
9W41-43-037-16399 ✓	SI	SI		SI
9W43-43-037-16400 ✓	SI	SI		SI
10W21-43-037-16401 ✓	SI	SI		SI
10W23-43-037-16402 ✓	1250	270		7548
10W43-43-037-16403 ✓	1225	24		6665
11W44-43-037-15842 ✓	2300	235		6581
12W13-43-037-16404 ✓	2350	114		3180
12W22-43-037-15845 ✓	300	618		17,313
12W24 New 2/21/87 ✓ 43-037-31151	0	559		4469
12W31-43-037-15847 ✓	0	485		13,589
12W33-43-037-15848 ✓	150	447		12,503
12W42-43-037-15850 ✓	1700	532		14,887
12W44-43-037-16405 ✓	SI	SI		SI
13W11 New 2/20/87 ✓ 43-037-31152	0	287		2584
13W22 New 2/23/87 ✓ 43-037-15852	0	391		2349
13W24 New 2/3/87 ✓ 43-037-15853	0	332		8638
13W32 2/2/87 43-037-16406	Converted to a producing oil well			
13W42-43-037-15857 ✓	1850	365		10,211
13W44-43-037-16407 ✓ 43-037-15860	2300	165		41609
14W42 New 2/27/87	0	353		707
14W43-43-037-16416 ✓	SI	SI		SI
15W21-43-037-16411 ✓	1075	302		8446

MONTHLY OIL AND GAS DISPOSITION REPORT

OPERATOR NAME AND ADDRESS:

L. B. SHEFFIELD
 BRIAN BERRY
~~KEPNA MOBIL~~
 POB 219031 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.
JFC*

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	243925	5885		

RECEIVED

SEP 13 1993

DIVISION OF
OIL, GAS & MINING

COMMENTS: *PLEASE NOTE ADDRESS change. Mobil ~~new~~ 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.

Date: 9/5/93

Name and Signature: *L. B. Sheffield*

Telephone Number: *303.565.2212*
244.658.2528

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>10. FIELD AND POOL, OR WILDCAT GREATER ANETH</p>		<p>11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA</p>
<p>14. API NO.</p>	<p>15. ELEVATIONS (Show whether DF, RT, GR, etc.)</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:		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) _____</p>	<p>FULL 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>CHANGE OF OPERATOR</u></p> <p>(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)</p>	<p>REPAIRING WELL <input type="checkbox"/></p> <p>ALTERING CASING <input type="checkbox"/></p> <p>ABANDONMENT* <input type="checkbox"/></p>
<p>APPROX. DATE WORK WILL START _____</p>		<p>DATE OF COMPLETION _____</p>	

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:

12W-44	43-037-16405	14-20-603-246A	SEC. 12, T41S, R23E	SE/SE 660 FSL; 660 FEL
12W-44A	43-037-31543	14-20-603-246A	SEC. 12, T41S, R23E	SE/SE 807 FEL; 772 FSL
13-11W	43-037-31152	14-20-603-247A	SEC. 13, T41S, R23E	NW/NW 500 FNL; 660 FWL
13-12	43-037-31127	14-20-603-247A	SEC. 13, T41S, R23E	SW/NW 1705 FNL; 640 FWL
13W-13	43-037-15851	14-20-603-247A	SEC. 13, T41S, R23E	NW/SW 1980 FSL; 4620 FEL
13-14	43-037-31589	14-20-603-247A	SEC. 13, T41S, R23E	660 FSL; 660 FWL
13-21	43-037-31128	14-20-603-247A	SEC. 13, T41S, R23E	NE/NW 660 FNL; 1920 FWL
13W-22	43-037-15852	14-20-603-247A	SEC. 13, T41S, R23E	SE/NW 1988 FNL; 3300 FEL
13-23	43-037-31129	14-20-603-247A	SEC. 13, T41S, R23E	NE/SW 1980 FSL; 1930 FWL
13W-44	43-037-15853	14-20-603-247	SEC. 13, T41S, R23E	600 FSL; 3300 FEL
13W-32	43-037-16406	14-20-603-247A	SEC. 13, T41S, R23E	1881 FNL; 1979 FEL
13W-33	43-037-15855	14-20-603-247A	SEC. 13, T41S, R23E	NW/SE 1970 FSL; 1979 FEL
13W-34	43-037-31130	14-20-603-247A	SEC. 13, T41S, R23E	SW/SE 660 FSL; 1980 FEL
13-41	43-037-15856	14-20-603-247A	SEC. 13, T41S, R23E	NE/NE 660 FNL; 660 FEL
13W-42	43-037-15857	14-20-603-247A	SEC. 13, T41S, R23E	SE/NE 2139; 585 FEL
13-43	43-037-31131	14-20-603-247A	SEC. 13, T41S, R23E	NE/SE 1700 FSL; 960 FEL
13W-44	43-037-16407	14-20-603-247A	SEC. 13, T41S, R23E	SE/SE 635 FSL; 659 FEL
14-02	NA	14-20-603-4037	SEC. 11, T41S, R23E	SW/SW 660 FSL; 660 FEL
14-32	43-037-15858	14-20-603-247A	SEC. 14, T41S, R23E	2130 FNL; 1830 FEL
14-41	43-037-31623	14-20-603-247A	SEC. 14, T41S, R23E	NE/NE 521 FEL; 810 FNL
14W-42	43-037-15860	14-20-603-247A	SEC. 14, T41S, R23E	SE/NE 1976 FNL; 653 FEL
14W-43	43-037-16410	14-20-603-247A	SEC. 14, T41S, R23E	3300 FSL; 4770 FEL
14-33	43-037-15859	14-20-603-247	SEC. 14, T41S, R23E	2130 FSL; 1830 FEL
15-12	43-037-15715	14-20-603-355	SEC. 15, T41S, R24E	1820 FNL; 500 FWL
15W-21	43-037-16411	14-20-603-355	SEC. 15, T41S, R24E	660 FNL; 1820 FWL
15-22	43-037-30449	14-20-603-355	SEC. 15, T41S, R24E	SE/NW, 1980 FNL; 2050 FWL
15-32	43-037-15717	14-20-603-355A	SEC. 15, T41S, R24E	1980 FNL; 1980 FEL
15-33	43-037-15718	14-20-603-355	SEC. 15, T41S, R24E	NW/SE 1650 FSL; 1980 FEL
15-41	43-037-15719	14-20-603-355	SEC. 15, T41S, R24E	660 FNL; 660' FEL
15-42	43-037-30449	14-20-603-355	SEC. 15, T41S, R24E	SE/NE 2020 FNL; 820 FEL
16W-42	43-037-15720	14-20-603-355	SEC. 16, T41S, R24E	SW/NW 1880 FNL; 660 FWL
16-13	43-037-31168	14-20-603-355	SEC. 16, T41S, R24E	1980 FSL; 660 FWL
16W-14	43-037-15721	14-20-603-355	SEC. 16, T41S, R24E	SW/SW 660 FSL; 660 FWL
16W-21	43-037-16414	14-20-603-355	SEC. 16, T41S, R24E	NE/NW 660 FNL; 1880 FWL
16W-23	43-037-15722	14-20-603-355	SEC. 16, T41S, R24E	NE/SW 1980 FSL; 1980 FWL
16-32	43-037-15723	14-20-603-355	SEC. 16, T41S, R24E	1980 FNL; 1980' FEL
16-34	43-037-15724	14-20-603-355	SEC. 16, T41S, R24E	660 FNL; 1980' FEL
16-41	43-037-15725	14-20-603-355	SEC. 16, T41S, R24E	660 FNL; 660 FEL
16W-43	43-037-16415	14-20-603-355	SEC. 16, T41S, R24E	NE/SE 2140 FSL; 820 FEL
17-11	43-037-31169	14-20-603-353	SEC. 17, T41S, R24E	NW/NW 1075' FNL; 800' FWL
17W-12	43-037-15726	14-20-603-353	SEC. 17, T41S, R24E	SW/NW 1980' FNL; 510' FWL
17-13	43-037-31133	14-20-603-353	SEC. 17, T41S, R24E	NW/SW 2100' FSL; 660' FWL
17W-14	43-037-15727	14-20-603-353	SEC. 17, T41S, R24E	SW/SW 660' FSL; 660' FWL
17W-21	43-037-16416	14-20-603-353	SEC. 17, T41S, R24E	510' FNL; 1830' FWL
17-22	43-037-31170	14-20-603-353	SEC. 17, T41S, R24E	1980' FNL; 1980' FWL
17W-23	43-037-15728	14-20-603-353	SEC. 17, T41S, R24E	NE/SW 1980' FWL; 1880' FSL
17-31	43-037-31178	14-20-603-353	SEC. 17, T41S, R24E	NW/NE 500' FNL; 1980' FEL
17-32W	43-037-15729	14-20-603-353	SEC. 17, T41S, R24E	SW/NE 1830' FNL; 2030' FEL
17-33	43-037-31134	14-20-603-353	SEC. 17, T41S, R24E	NW/SE 1980' FSL; 1845' FEL
17-34W	43-037-15730	14-20-603-353	SEC. 17, T41S, R24E	SW/SE 560' FSL; 1880' FEL
17W-41	43-037-15731	14-20-603-353	SEC. 17, T41S, R24E	610' FNL; 510' FEL
17-42	43-037-31177	14-20-603-353	SEC. 17, T41S, R24E	SE/NE 1980; FNL, 660' FEL
17-44	43-037-15732	14-20-603-353	SEC. 17, T41S, R24E	660 FSL; 660' FEL
17W-43	43-037-16417	14-20-603-353	SEC. 17, T41S, R24E	NE/SE 1980' FSL; 660' FEL
18-11	43-037-15733	14-20-603-353	SEC. 18, T41S, R24E	NW/NW 720' FNL; 730' FWL
18-12W	43-037-31153	14-20-603-353	SEC. 18, T41S, R24E	SW/NW 1980' FNL; 560' FWL
18W-21	43-037-16418	14-20-603-353	SEC. 18, T41S, R24E	NE/NW 660' FNL; 1882' FWL
18-22	43-037-31236	14-20-603-353	SEC. 18, T41S, R24E	SW/NW 2200' FNL; 2210' FWL
18W-23	43-037-30244	14-20-603-353	SEC. 18, T41S, R24E	NE/SW 2385' FSL; 2040' FWL
18W-14	43-037-15735	14-20-603-353	SEC. 18, T41S, R24E	SW/SW 810' FSL; 600' FWL
18-24	43-037-31079	14-20-603-353	SEC. 18, T41S, R24E	SE/SW 760' FSL; 1980' FWL
18-31	43-037-31181	14-20-603-353	SEC. 18, T41S, R24E	NW/NE 795' FNL; 2090; FEL
18W-32	43-037-15736	14-20-603-353	SEC. 18, T41S, R24E	SW/NE 2140' FNL; 1830' FEL
18-33	43-037-31135	14-20-603-353	SEC. 18, T41S, R24E	NW/SE 1870' FSL; 1980' FEL
18-34W	43-037-15737	14-20-603-353	SEC. 18, T41S, R24E	SW/SE 780' FSL; 1860 FEL
18W-41	43-037-15738	14-20-603-353	SEC. 18, T41S, R24E	NE/NE 660' FNL; 660' FEL
18-42	43-037-31182	14-20-603-353	SEC. 18, T41S, R24E	SE/NE 2120' FNL; 745' FEL
18W-43	43-037-16419	14-20-603-353	SEC. 18, T41S, R24E	NE/SE 1980' FSL; 660' FEL
18-44	43-037-31045	14-20-603-353	SEC. 18, T41S, R24E	SE/SE 660' FSL; 660' FEL
19-11	43-037-31080	14-20-603-353	SEC. 19, T41S, R24E	NW/NW 660' FNL; 660' FWL
19-12	43-037-15739	14-20-603-353	SEC. 19, T41S, R24E	600' FWL; 1980' FNL
19-14	43-037-15740	14-20-603-353	SEC. 19, T41S, R24E	600' FSL; 660' FEL

PA'd

PA'd

Sept 29, 1993

TO: Lisha Cordova - Utah Mining
Oil & Gas

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

Here is copy of Rotherford Unit
Successor Operator,

4 pages including this one.

File Rutherford Unit (GC)

RECEIVED
BLM

JUL 27 AM 11:44

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

070 FARMINGTON, NM

ARES/543

JUL 23 1993

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

MINERAL	
NO. 1	
DATE	
BY	
FILE	
ALL SUPP.	
FILE	

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 Rutherford 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

JUN 27 11:44

Phillips Petroleum Company is, on the records of the Bureau of Indian Affairs, operator of the Ratherford Unit,

070 FARMINGTON, NM

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

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

Mobil Exploration and Producing
North America Inc.

June 11, 1993

By: B. D. [Signature]
Attorney-in-Fact B.D. MARTINY

[Signature]
APPROVED BY

ACTING AREA DIRECTOR
TITLE

7/9/93
DATE

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, 1991
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.M. 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.M., 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.M., 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.M. 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.M., 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	100.0000000

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-REC/017-93
2-DEPT 58-1118
3-VLC
4-RJF
5-1118
6-FV

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>N0772(A)</u>

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

Name: **SEE ATTACHED**	API: <u>4303716406</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

- See 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)
- See 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: _____.
- See 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.
- See 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)
- See 6. Cardex file has been updated for each well listed above. (O&G wells 10-6-93) (wiw's 10-26-93)
- See 7. Well file labels have been updated for each well listed above. (O&G wells 10-6-93) (wiw's 10-26-93)
- See 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)
- See 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

- 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).
- 2. State Lands and the Tax Commission have been notified through normal procedures of entity changes.

BOND VERIFICATION (Fee wells only)

- 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) no. Today's date _____ 1993. If yes, division response was made by letter dated _____ 1993.

LEASE INTEREST OWNER NOTIFICATION RESPONSIBILITY

- 1. (Rule R615-2-10) The former operator/lessee of any fee lease well listed above has been notified by letter dated _____ 1993, 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.
- 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 1993.

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

931006 BIA/Btm Approved 7-9-93.

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: _____

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

RECEIVED
MAY 16 1986

Attn: R. J. Firth
Associate Director

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

Division of Oil, Gas and Mining
OPERATOR CHANGE WORKSHEET

Routing:	
1- LVC	7-PL
2-LWP	8-SJ
3- DES	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>037-16406</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

- 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.
- Sec 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. 8-21-95
- LWP 7. Well file labels have been updated for each well listed above. 9-28-95
- Sec 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)
- 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

- 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).
- 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!*

- 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) no. Today's date _____ 1995. If yes, division response was made by letter dated _____ 1995.

LEASE INTEREST OWNER NOTIFICATION RESPONSIBILITY

- 1. (Rule R615-2-10) The former operator/lessee of any fee lease well listed above has been notified by letter dated 8/5/95 1995, 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.
- 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 1995.

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
OMB 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.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. 14-20-603-247A
2. Name of Operator Mobil Producing TX & NM Inc* *Mobil Exploration & Producing US Inc as agent for MPTM		6. If Indian, Allottee or Tribe Name NAVAJO TRIBAL
3a. Address P.O. Box 4358, Houston, TX 77210-4358	3b. Phone No. (include area code) 713-431-1022	7. If Unit or CA/Agreement, Name and/or No. Ratherford Unit
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 1881' FNL / 1979' FEL Sec 13-T41S-R23E SW/NE		8. Well Name and No. Ratherford 13-32
		9. API Well No. 43-037-16406
		10. Field and Pool, or Exploratory Area Greater Aneth
		11. County or Parish, State San Juan, UTAH

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 type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>Test ISMAY Zone</u>
	<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)

Mobil Exploration & Producing US Inc. as agent for Mobil Producing Texas & New Mexico Inc. & Mobil Exploration & Producing North America Inc requests approval to perforate the Ismay Zone in the subject well.

See attached procedures.

RECEIVED

OCT 12 2000

DIVISION OF
OIL, GAS AND MINING

COPY SENT TO OPERATOR
Date: 10-16-00
Initials: CHD

14. I hereby certify that the foregoing is true and correct Name (Printed/Typed) Mark Del Pico	Title Regulatory Specialist
Signature <i>Mark Del Pico</i>	Date 10/10/00

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <i>[Signature]</i>	Title <i>Petr. Engr.</i>	Date <i>10-16-00</i>
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 <i>Utah DOGM, SLC</i>	

SUB SURFACE MAINTENANCE PROGRAM

WELL NO : Ratherford 1332 / AP # 43-037-16406

SEC 13 - T41S - R23E

San Juan County, Utah

To pull equipment and perforate the Ismay zone.

GENERAL PROCEDURES

EHS Instructions

- A. All potential loss of well control and/or spills of formation fluids must be reported to the necessary governing agency immediately.
- B. Material Safety Data Sheets (MSDS) must be maintained on location for all materials and fluids except standard lubricants.
- C. When closing pits, cut the pit liner at the mud line & then backfill according to field specs. For more information contact Davis Benallie of the Navajo EPA.

- (1) Prior to MIRU, fill tbg and csg capacity w/ 9.8ppg water and shut-in. Record tbg and csg pressure and calculate kill fluid. Once kill fluid has been determined, proceed to kill the well.
- (2) MIRU PU, remove horse's head and pitman arms. ND WH, NU rod BOP/Hydril.
- (3) POOH SB polish rod, 95 - 7/8" rods, 122 - 3/4" rods, and LD 2" x 1.5" x 26' pump
- (4) Drop SV and test tbg to 3000psi.
- (5) ND rod BOP/ Hydril and NU 2 7/8" BOP/Hydril.
- (6) Unseat TAC and POOH SB 2 7/8" tbg string.
*Note - There may be a joint of IPC tbg, perf sub, and 3 1/2" blast joint below the TAC.
If this is the case, then SB in the derrick along with the 2 7/8" tbg string.*
- (7) MIRU Schlumberger perf company.
- (8) PU swab cup and RIH on sandline and swab the fluid down leaving approximately 4000' of fluid and check for inflow.
- (9) RIH w/ 4" HEG (High Efficiency Gun 4spf, 90deg phase) on wireline.
- (10) Use gamma ray w/ CCL log to get on depth. The intervals of interest are 5373' to 5386' and 5390' to 5399'.
- (11) Rig up manifold to allow the following steps to be taken:
 - (1) Flowback to the pit
 - (2) Pump kill fluid
- (12) Make a second correlation run if the correct depth is in question.
- (13) Fire guns, open well and flow to pit until it cleans up.

Continued

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OCT 12 2000

DIVISION OF
OIL, GAS AND MINING

- (14) **RDMO Schlumberger company.**
- (15) **Kill well as necessary. PU 3 1/2" mud anchor, perf sub, SN, 1jt of IPC, TAC, and RIH on 2 7/8" existing tbg string.**
- (16) **Set TAC at approximately 5235'.**
- (17) **PU gas anchor, 2" x 1.75" x 26' pump, and RIH on 95 - 7/8" rods, and 122 - 3/4" rods.**
- (18) **Space out pump 16.3" off bottom.**
- (19) **ND BOP/ NU WH. Change out stuffing box.**
- (20) **Re-assemble horse's head, check position of polish rod, check pump action, and pressure test to 500#.**
- (21) **RDMO PU, and clean location.**

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OCT 12 2000

DIVISION OF
OIL, GAS AND MINING

**Rutherford 13-32
WELL ID
API # 43-037-16406
SEC 13 -T41S - R23E**

- OVERALL OBJECTIVE:**
- (1) Pull equipment
 - (2) Perforate csg
 - (3) Return well to production

Conductor pipe - 16", 42#,
76', w/ 105sx

Csg size - 10 3/4", 32# 1378',
w/200sx

2 7/8" Tbg

Surface Csg Shoe @ 1378'

MUD WEIGHT:
MUD VISCOSITY:

COMPLETION DATE: _____
TOTAL COST: _____

EXISTING EQUIPMENT

Run time -

- string of 2 7/8" tbg
- 95 - 7/8" grade D rods
- 122 - 3/4" grad D rods
- 2 " x 1.5" x 26' pump

NEW EQUIPMENT INFO

- string of 2 7/8" tbg
- 95 - 7/8" grade D rods
- 122 - 3/4" grad D rods
- 2 " x 1.75" x 26' pump
- Added the following perfs
- 5373'-5386' @4spft
- 5390'-5399' @4spft
- w/ a maximum penetration of 21.67" w/ a 0.42" diameter hole

TOC 3900'

TAC @ 5308'

Production Csg - 7",
23#, 5421'

SN @ 5434'

8.5" Open hole from
5421' - 5480'

PBTD - 5480'
TD - 5588'

RECEIVED

OCT 12 2000

DIVISION OF
OIL, GAS AND MINING

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.

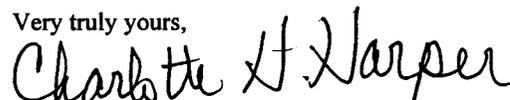
Please note the change of name of MOC to ExxonMobil Oil Corporation in your records pertaining to any MOC permits.

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 29 2001

DIVISION OF
OIL, GAS AND MINING



IN REPLY REFER TO:

United States Department of the Interior

BUREAU OF INDIAN AFFAIRS

~~XXXXXXXXXXXX~~
Navajo Area Office
NAVAJO REGION

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

AUG 30 2001

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,

GENE 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	_____
PERMITS TEAM	<i>2</i>
O & G INSPECTION TEAM	_____
ALL TEAM LEADERS	_____
LAND RESOURCES	_____
ENVIRONMENT	_____
FILES	_____

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

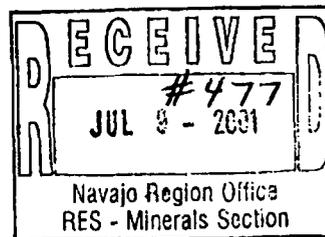
AB 7/12/2001
SN
593
File

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.

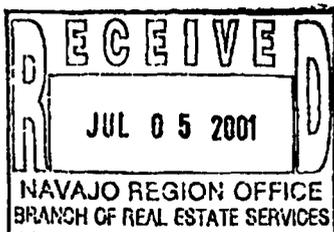
If you have any questions , please contact Alex Correa at (713) 431-1012.

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 Isaac

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.

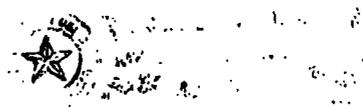
WITNESS, my hand and the seal of the Corporation at Irving, Texas, this 8th day of June, 2001.

S. 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

NW 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



**Chubb
Surety**

**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, to me known to be Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY, 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 the signature thereto subscribed by authority of said Notary Public dependent's presence.



Notary Public State of New Jersey
No. 2231647

Karen Price
Notary Public

Commission Expires Oct 28, 2004

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 07:00 NO.132 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. Ritch, President 

STATE OF TEXAS)
COUNTY OF DALLAS)

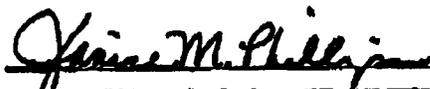
F. L. REID, being duly sworn, deposes and says that he is the Secretary of MOBIL OIL CORPORATION, the corporation mentioned and described in the foregoing instrument; that he has read and signed the same and that the statements contained therein are true.



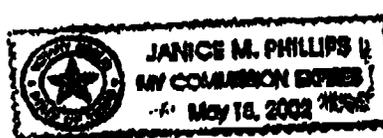
F. L. REID, Secretary

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.153 04/04
F010601000187

CSC 45

CERTIFICATE OF AMENDMENT

OF

MOBIL OIL CORPORATION

Under Section 805 of the Business Corporation Law

SAC

100 cc

**STATE OF NEW YORK
DEPARTMENT OF STATE**

Filed by: EXXONMOBIL CORPORATION
(Name)

FILED JUN 01 2001

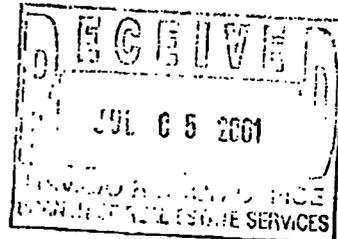
6949 Las Colinas Blvd.
(Mailing address)

TAX \$ _____
BY: *SAC*

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

ny Albany

Cost Ref # 1655781MPJ



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. Heub", followed by a horizontal line extending to the right.

Special Deputy Secretary of State

OPERATOR CHANGE WORKSHEET

ROUTING

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)

NAME	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

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 06/29/2001
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 06/29/2001
- The new company has been checked through the **Department of Commerce, Division of Corporations Database** on: 04/09/2002
- Is the new operator registered in the State of Utah: YES Business Number: 579865-0143
- 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 Communization 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. 1004-0135
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.
1A-20-603-247-A

6. If Indian, Allottee or Tribe Name
Navajo Tribal

7. If Unit or CA/Agreement, Name and/or No.
Ratherford Unit 13-32
SW-I-4192

8. Well Name and No.
Ratherford Unit #13-32

9. API Well No.
43-037-16406

11. County or Parish, State
Greater Aneth
San Juan, Utah

SUBMIT IN TRIPLICATE - Other Instructions on reverse side

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator
ExxonMobil Corporation

3a. Address
PO Box 4358, Houston, TX 77210

3b. Phone No. (include area code)
281-654-1021

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1881' FNL & 1979' FEL
Section 13, T41S, R23E

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 type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>Add perfs & Log.</u>
	<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 proposal is to deepen directionally or recompleat 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 recalculation, have been completed, and the operator has determined that the site is ready for final inspection.)

12-14-00 - 01-09-01 - MIRU. Bled well down. POOH w/rods, tubing, pump & TAC. NU BOP.
01-10-01 RU Schlumberger Wireline. Run Gamma Ray & CCL to 5421'. PU gun & perf 5390-5399', 5473-5386.
01-11-01 - 01-12-01 - RIH w/tubing, rods, pump & stabilizer bar. Land tubing 16" off bottom. PBTD @ 5474'. Return well to production.

RECEIVED
DEC 15 2003
DIV. OF OIL, GAS & MINING

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

Name (Printed/Typed) Nathania R. Algawad Title Contract Completions Admin

Signature *Nathania R. Algawad* Date 12/12/03

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by _____ Title _____ Date _____

Office _____

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 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
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			5. LEASE DESIGNATION AND SERIAL NUMBER: 1420603247A
OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____			6. IF INDIAN, ALLOTTEE OR TRIBE NAME: SHIP ROCK
2. NAME OF OPERATOR: EXXONMOBIL OIL CORPORATION			7. UNIT or CA AGREEMENT NAME: UTU68931A
3. ADDRESS OF OPERATOR: P. O. BOX 4358 CITY HOUSTON STATE TX ZIP 77210		PHONE NUMBER: (281) 654-1946	8. WELL NAME and NUMBER: <i>N Decat CR 52-13</i> RATHERFORD UNIT (13-32)
4. LOCATION OF WELL			9. API NUMBER: 4303716406
FOOTAGES AT SURFACE: 1881 FNL, 1979 FEL		COUNTY: SAN JUAN	
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWNE 13 41S 23E S		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>4/1/2005</u>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion:	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input checked="" type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.
1. MIRU WSU. Bleed off pressure. Kill well as necessary. POH with rods and pump. ND tree and NU/Test BOPE.
 2. POOH laying down production tubing. MI and rack 5400' of 2 7/8" workstring.
 3. PU and RIH with CIBP on 2 7/8" workstring. Set CIBP @ 5375'. Test casing to 1000 psi. Bleed off pressure.
 4. MIRU BJ Services cementing equipment. Spot a 1050' balanced cement plug from 5375'-4375' with 200 sx of Class H cement. (15.8 ppg density and 1.15 cu ft/sk yield) PUH and reverse workstring clear.
 5. Wait on cement. RIH and tag cement. Circulate wellbore with 10 ppg mud.
 6. POOH with workstring. Lay down excess workstring.
 7. MIRU WLSU. Perforate 7" casing from 1773'-1775' with 4 spf (8 holes). Establish circulation between 7" x 10 3/4" annulus. Once circulation is established, RDMO WLSU.
 8. PU and RIH with 7" CICR on workstring. Set CICR @ 1723'. Establish circulation and pump 390 sx Type III cement (14.6 ppg and 1.37 cf/sk yield) between the 7" x 10 3/4" casing strings. Once good cement arrives at surface, latch out of the CICR and fill the remaining casing to within 10' of the surface with 280 sx Type III cement (14.6 ppg and 1.37 cf/sk yield). Lay down workstring as needed to spot cement.
 9. ND BOPE and wellhead. PU and RIH with a 7" mechanical casing cutter on 1 joint of workstring. Cut 7" casing 6' below ground level. PU and lay down mechanical cutter and wellhead.
 10. Top fill all casing strings with cement.
 11. Weld steel cap with marker with the required information across the casing stub.
 12. Clean location and RDMO WSI
 13. Complete the required location reclamation

NAME (PLEASE PRINT) MARK BOLTON
SIGNATURE *Mark Bolton*

TITLE SR. REG SPECIALIST
DATE 12/1/2004

COPIES SENT TO OPERATOR
Date: 12-8-04
Initials: CHC

(This space for State use only)

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

Federal Approval Of This
Action Is Necessary

**RECEIVED
DEC 02 2004**

Date: 12/17/04
By: *D. S. [Signature]* (See Instructions on Reverse Side)

Wellbore Diagram

API Well No: 43-037-16406-00-00 Permit No: 63

Well Name/No: N DESERT CR 32-13 (13-32)

Company Name: EXXONMOBIL OIL CORP

Location: Sec: 13 T: 41S R: 23E Spot: SWNE

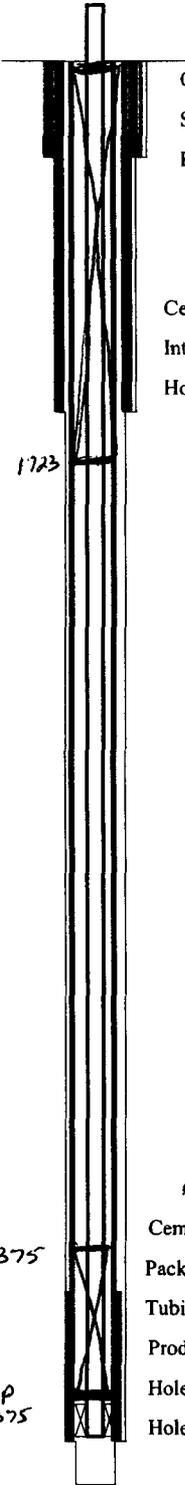
Coordinates: X: 647402 Y: 4121052

Field Name: GREATER ANETH

County Name: SAN JUAN

String Information

String	Bottom (ft sub)	Diameter (inches)	Weight (lb/ft)	Length (ft)
SURF	76	16	42 # H-40	
II	1378	10.75		
PROD	5421	7		
T1	5400	2.5		
PKR	5400			



Cement from 76 ft. to surface
 Surface: 16 in. @ 76 ft.
 Hole: Unknown

Cement from 1378 ft. to surface
 Intermediate: 10.75 in. @ 1378 ft.
 Hole: Unknown

1723
 cement @ 1723'
 part @ 1723-75
 plug #2 1723 - Surface backside
 7" 1723 - Surface

Cement Information

String	BOC (ft sub)	TOC (ft sub)	Class	Sacks
II	1378	0		
PROD	5421	4830 (Calc)		
SURF	76	0		

Perforation Information

Top (ft sub)	Bottom (ft sub)	Shts/Ft	No Shts	Dt Squeeze
5421	5588			
5373 - 5386				

Formation Information

Formation	Depth
SRMP	2204
MNKP	2255
CTLR	2341
HRMS	4409
PRDX	5403

1000' plug
plug 1-4375-5375
 Cement from 5421 ft. to 4830 ft.
 Packer: @ 5400 ft.
 Tubing: 2.5 in. @ 5400 ft.
 Production: 7 in. @ 5421 ft.
 Hole: Unknown
 Hole: Unknown

TD: 5588 TVD: PBD: 0

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires January 31, 2004

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.
1420603247A

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 1332

9. API Well No.
43-037-16406

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
Exxon Mobil Corporation

3a. Address **P.O. Box 4358 Houston TX 77210-4358** 3b. Phone No. (include area code) **(281) 654-1913**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Sec 13 T41S R23E SWNE 1881 FNL 1979 FEL

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 type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input checked="" 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 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.)

3/15/05
MIRU WSU Rig #61, Spot equipment, Set up Safety Equipment. Bled well down well has 1000 psi on the tubing and casing, Flowed back well into the frac tank all day. SION

3/16/05
BJSA, Bled well down tubing casing had 700 psi, Flowed well into a frac tanks about 30 bbls, took off horse head and lay it down, Spot in float, POH with polish rod lay it down, subs, 14 - 1" rods, 76 - 7/8" rods, 66 - 3/4" rods plus a parted 3/4" rods, tried to psi test the tubing no psi. SION

RECEIVED

APR 08 2005

DIV. OF OIL, GAS & MINING

SEE ATTACHMENT FOR ADDITIONAL REMARKS

14. I hereby certify that the foregoing is true and correct Name (Printed/Typed) Jacqueline P. Davis	Title Support Staff Office Assistant
Signature <i>Jacqueline P. Davis</i>	Date 04/07/2005

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 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.

A T T A C H M E N T
 UNITED STATES
 DEPARTMENT OF THE INTERIOR
 BUREAU OF LAND MANAGEMENT

FORM APPROVED
 OMB 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.
1420603247A

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 1332

9. API Well No.
43-037-16406

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

Exxon Mobil Corporation

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

3b. Phone No. (include area code)
(281) 654-1913

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

Sec 13 T41S R23E SWNE 1881 FNL 1979 FEL

Additional Remarks

3/17/05

BJSA, Bled Well Down both tubing and casing had 500 psi. ND wellhead, NUBOP plus Hydrill, RU rig floor, tong, POOH with 1 joint of tubing and PU packer, TIH with packer and set it, psi tested to 500 psi and it tested good. function tested pipe rams and the bags, POOH with packer and lay it down, tubing and casing flowing, TOO H with 167 joints, TAC, 5 joints and 5' of 2 7/8" tbg no good, swap out tubnig trailer, the back end of the tubing kept sinking in the ground, ground was too soft. SION

3/18/05

BJSA, Bled well down, casing had 300 psi and tubing had 0 psi, had to spot the work string tubing from a diff. spot, PU Bit and Scraper, TIH with 157 joints of tubing, 4886' tagged on top of parted rods still in the hole, TOO H and lay down 12 joint, and stand the rest of the tubing in the dirreck, 72 stands. lay down bit and scraper, PU Retainer and TIH with 145 joints of tubing, PU 10 more joints and tagged with 155 joints, lay back down 1 joint. have 154 joints of tubing ~~in hole with Cement Retainer.~~ SION.

3/19 - 20/05

No Rig Activity Week end

3/21/05

BJSA, Bled well down, tubing and casing had 500 psi, Set Cement retainer at 4780', psi test tubing to 2000 psi and tested good, and tested casing to 500 psi and it tested good. sting out, and circulated fresh water (138 bbls) sting back in. RU BJ services, safety meeting , psi tested BJ services lines, 2000 psi, BJ pumped about 25 bbls of cement below the retainer, and about 25 bbls of displacement, shut down, sting out, and bj service pumed cement about 19 bbls of cement above the retainer, and about 25 bbls of displacement. Shutr down BJ Services, TOO H with 22 stands and stand them in the dirreck, and lay down the rest of of the tubing about (110 joints) and lay down stinger. SION

3/22/05

BJSA, Bled well down No psi, RU wire line service unit, tagged cement at 4275' and perforate casing at 1495', circulate down the casing up the bradon head, RD wire line service unit. PU cement retainer and TIH with 44 joint of tubing and set retainer at 1400', RU BJ services pumped about 10 bbls of water to break circulation, pump about 115 bbls of cement to surface up the bradon head shut down, sting out and started pumping cement down the tubing about 25 bbls and shut down, TOO H with 22 joints and lay down tubing, RU BJ and started to pump cement about 15 bbls to surface, shut down, RD BJ TOO H with the 23 joints of tubing plus stinger and lay them down, RD down rig floor and NDBOP plus Hydrill, PU casing cutter plus 1 joint of tubing, cut casing and RD cutting tool. lay down tool and pump more cement filled it to suface. Final Report.

RECEIVED
APR 08 2005

DIV. OF OIL, GAS & MINING

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: <u>6/1/2006</u>	
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		5. LEASE DESIGNATION AND SERIAL NUMBER:	
OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>Unit Agreement</u>		See attached list	
2. NAME OF OPERATOR:		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
Resolute Natural Resources Company <u>N2700</u>		Navajo Tribe	
3. ADDRESS OF OPERATOR:		7. UNIT or CA AGREEMENT NAME:	
1675 Broadway, Suite 1950 CITY Denver STATE CO ZIP 80202		Ratherford Unit	
4. LOCATION OF WELL		8. WELL NAME and NUMBER:	
FOOTAGES AT SURFACE: <u>See attached list</u>		See attached list	
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:		9. API NUMBER:	
		Attached	
		10. FIELD AND POOL, OR WILDCAT:	
		Greater Aneth	
		COUNTY: <u>San Juan</u>	
		STATE: <u>UTAH</u>	

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

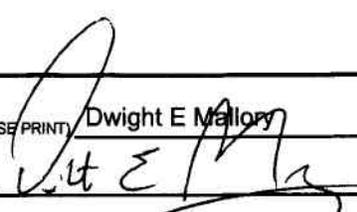
TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input 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 <i>N1855</i>		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
PHONE NUMBER: (281) 654-1936		9. API NUMBER: attached
COUNTY: San Juan		10. FIELD AND POOL, OR WILDCAT: Aneth
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 <i>Laurie B. Kilbride</i>	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	SENW	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	SENW	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	SENW	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	SENW	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