Form 97 8M 5-69

Application No. 53773

APPLICATION TO APPROPRIATE WATER
STATE OF UTAH

NOTE:—The information given in the following blanks should be free from explanatory matter, but when necessary, a complete supplementary statement should be made on the following page under the heading "Explanatory."

For the purpose of acquiring the right to use a portion of the unappropriated water of the State of Utah, for uses indicated by (X) in the proper box or boxes, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of the Laws of Utah.

1. Irrigation ☐ Domestic ☐ Stockwatering ☐ Municipal ☐ Power ☐ Mining ☒ Other Uses ☐
2. The name of the applicant is PHILLIPS PETROLEUM COMPANY
3. The Post Office address of the applicant is Bartlesville, Oklahoma
4. The quantity of water to be appropriated is -- 8 -- second-feet or ...... acre-feet
5. The water is to be used for See Explanatory (Major Purpose) from January 1 (Month) (Day) to December 31 (Month) (Day)

   other use period ...... (Minor Purpose) from ...... (Month) (Day) to ...... (Month) (Day)

   and stored each year (if stored) from ...... (Month) (Day) to ...... (Month) (Day)

RECEIVED
AUG 13 1984
DIVISION OF OIL GAS & MINING

6. The drainage area to which the direct source of supply belongs is ...... (Leave Blank)
7. The direct source of supply is* Underground water and subsurface flow of San Juan River (Name of stream or other source)

   which is tributary to Colorado River, tributary to ......

*Note.—Where water is to be diverted from a well, a tunnel, or drain, the source should be designated as "Underground Water" in the first space and the remaining spaces should be left blank. If the source is a stream, a spring, a spring area, or a drain, so indicate in the first space, giving its name, if named, and in the remaining spaces, designate the stream channels to which it is tributary, even though the water may sink, evaporate, or be diverted before reaching said channels. If water from a spring flows in a natural surface channel before being diverted, the direct source should be designated as a stream and not a spring.

8. The point of diversion from the source is in San Juan County, situated at a point* ~~See Explanatory~~ #1-S.1000 ft. and W. 150 ft.; #2-S.1000 ft. and W. 450 ft.; #3-S.1000 ft. and W. 750 ft.; #4-S.1000 ft. and W. 1050 ft.; #5-S.1000 ft. and W. 1350 ft.; #6-S.1000 ft. and W. 1650 ft.; #7-S.1000 ft. and W. 1950 ft.; #8-S.1000 ft. and W. 2250 ft.; #9-S.1000 ft. and W. 2550 ft.; and #10-S.1000 ft. and W. 2850 ft.; all from NE Cor. Sec. 5, T41S, R24E. SLB&M. (See letter of 7-16-81 attached)

*Note.—The point of diversion must be located definitely by course and distance or by giving the distances north or south, and east or west with reference to a United States land survey corner or United States mineral monument, if within a distance of six miles of either, or if at a greater distance, to some prominent and permanent natural object. No application will be received for filing in which the point of diversion is not defined definitely.

9. The diverting and carrying works will consist of See Explanatory
10. If water is to be stored, give capacity of reservoir in acre-feet ...... height of dam ......

    area inundated in acres ...... legal subdivision of area inundated ......
11. If application is for irrigation purposes, the legal subdivisions of the area irrigated are as follows:

    ...... Total ...... Acres
12. Is the land owned by the applicant? Yes...... No......
13. Is this water to be used supplementally with other water rights? Yes...... No......

    If "yes," identify other water rights under explanatory.
14. If application is for power purposes, describe type of plant, size and rated capacity......
15. If application is for mining, the water will be used in Greater Aneth Area ~~Mining District~~ ~~at the~~ oil field ~~mine~~, where the following ores are mined oil and gas
16. If application is for stockwatering purposes, number and kind of stock watered......
17. If application is for domestic purposes, number of families to be served......
18. If application is for municipal purposes, name of municipality......
19. If application is for other uses, include general description of proposed uses......
20. Give place of use by legal subdivision of the United States Land Survey for all uses described in paragraphs 14 to 19, incl. See Explanatory
21. The use of water as set forth in this application will consume -- 8 -- second-feet of water and -- 0 -- second feet will be returned to the natural stream or source at a point described as follows: ......

EXPLANATORY

The following additional facts are set forth in order to define more clearly the full purpose of the proposed application:

ITEM 7

The water will be pumped from the diversion area to the oil field where the water will be injected under pressure through deep wells into the petroleum-bearing formations for pressure maintenance and secondary recovery purposes.

ITEM 8

The point or points of diversion from the source will be in Section 5, T41S, R24E SLM, San Juan County, situated as follows: From that point at which the south bank of the river channel intersects the east line of Section 5, T41S, R24E, to that point at which the South bank of river channel intersects the North line of Section 5, T41S, R24E.

Diversion will be from one or more wells or infiltration galleries to be drilled in the alluvial fill and to be located as close to the South bank of the river channel as is practical within the east-west limits as above defined. Specific location and number of diversion points will be determined by a hydrographic survey and/or producing characteristics of wells to be drilled. The aggregate withdrawal, the rate of which is not to exceed that specified in this application, will be commingled in a conveyance works described in greater detail herein.

ITEM 9

The diverting and carrying works will consist of 12-1/4" diameter wells, cased with 35 to 50 feet of 8-5/8 inch outside diameter pipe to be drilled to depths of from 35 feet to 50 feet and about 14,500 feet of 10-3/4 inch conveyance pipe to places of use.

ITEM 20

Township 41 South, Range 23 East, SLM

S/2 Sec. 1; SE/4 Sec. 2; E/2 Sec. 11; All Sec. 12; All Sec. 13, E/2 Sec. 14, NE/4 Sec. 24.

Township 41 South, Range 24 East, SLM

All Sections 3, 4, 5, 6, 7, 8, 9, 10; W/2 Sec. 11, W/2 Sec. 14; All Sections 15, 16, 17, 18, 19, 20, 21; NW/4, W/2 SW/4 Sec. 22; W/2 NE/4, NW/4, W/2 SW/4 Sec. 28; All Sections 29, 30; N/2 Sec. 31; N/2 Sec. 32.

Said described lands, which are in San Juan County, Utah, constitute the Ratherford portion of the Greater Aneth Area oil field.

Continued on page 4

(Use page 4 if additional explanatory is needed.)

The quantity of water sought to be appropriated is limited to that which can be beneficially used for the purpose herein described.

PHILLIPS PETROLEUM COMPANY

By: L. E. Fitzgerald

Signature of Applicant*

VICE PRESIDENT OF PRODUCTION

*If applicant is a corporation or other organization, signature must be the name of such corporation or organization by its proper officer, or in the name of the partnership by one of the partners, and the names of the other partners shall be listed. If a corporation or partnership, the affidavit below need not be filled in. If there is more than one applicant, a power of attorney, authorizing one to act for all, should accompany the Application.

DECLARATION OF CITIZENSHIP

STATE OF UTAH,
County of..... } ss

On the ..... day of..... , 19..... personally appeared before me, a notary public for the State of Utah, the above applicant who, on oath, declared that he is a citizen of the United States, or has declared his intention to become such a citizen.

My commission expires:

(SEAL)

Notary Public

FEES FOR APPLICATIONS TO APPROPRIATE WATER IN UTAH

Flow rate — c.f.s.				Cost	
0.0	to	0.1		$ 10.00	
over 0.1	to	0.5		20.00	
over 0.5	to	1.0		30.00	
over 1.0	to	15.0		30.00	plus $5/cfs above 1.00 cfs.
over 15.0				100.00	

Storage — acre-feet				
0	to	20	15.00	
over 20	to	500	30.00	
over 500	to	7500	30.00	plus $5/500 a. f. above first 500
over 7500			100.00	

(This section is not to be filled in by applicant)

STATE ENGINEER'S ENDORSEMENTS

10:00 a.m.

1. Feb. 27, 1961 Application received by mail / ~~over counter~~ in State Engineer's office by [illegible]
2. ..... Priority of Application brought down to, on account of .....
3. Feb. 27, 1961 Application fee, $ 15.00, received by [illegible] Rec. No. 02365
4. Mar. 10, 1961 Application ~~PHOTOSTATED~~ COPIED book 711-32, page 357, and indexed by T
5. [illegible] Application platted by [illegible] aac-(5)abd-( )abd-( )abd-( )abc ( )abc-( )abc ( )ac ( )bad
6. April 7, 1961 Application examined by MC
7. ..... Application returned, ... or corrected by office .....
8. ..... Corrected Application resubmitted over counter / by mail to State Engineer's office.
9. April 7, 1961 Application approved for advertisement by MC
10. June 16, 1961 Notice to water users prepared by R. K. H
11. June 29, 1961 Publication began; was completed July 13, 1961
    Notice published in San Juan Record, Monticello, Utah
12. June 27, 1961 Proof slips checked by [illegible]
13. ..... Application protested by .....

July 25, 1961 - Publication paid $8.22-1016 mm

14. ..... Hearing held by .....
15. ..... Field examination by .....
16. Sept. 5, 1961 Application designated for approval / ~~rejection~~ [illegible]
17. Sept. 11, 1961 Application copied or photostated by T.E. proofread by .....
18. Sept. 11, 1961 Application approved / ~~rejected~~
19. Conditions:

    This Application is approved, subject to prior rights, as follows:

    a. Actual construction work shall be diligently prosecuted to completion.

    b. Proof of Appropriation shall be submitted to the State Engineer's office by Feb. 28, 1963

    c. .....

Wayne D. Criddle
Wayne D. Criddle State Engineer.

20. ..... Time for making Proof of Appropriation extended to .....
21. ..... Proof of Appropriation submitted.
22. ..... Certificate of Appropriation, No. ....., issued

Application No. 32773

EXPLANATORY CONTINUED

The use of the applied for water for the planned pressure maintenance and secondary recovery operations will permit the recovery of substantial quantities of oil and gas which would otherwise not be recovered.

NOTICE TO APPLICANT

All waters in this state, whether above or under the ground, are the property of the public, subject to all existing rights to the use thereof. No appropriation of the unappropriated public water may be made and no rights to the use thereof shall be recognized except Application for such appropriation first be made to the State Engineer.

The approval of this Application is not a Certificate of Appropriation. It is merely your authority to begin construction work, which must be prosecuted diligently to completion. To secure a Certificate of Appropriation under this Application, Proof of Appropriation must be submitted within the time limit allowed by the State Engineer. The amount of water for which Certficate will be issued will depend upon the amount of water actually put to a beneficial use, not to exceed, however, the amount of water specified in this Application. Proof of Appropriation must be made in accordance with the requirements of the law. For further information write the State Engineer.

Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL [x] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [x] GAS WELL [ ] OTHER — SINGLE ZONE [ ] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: Phillips Oil Company

3. ADDRESS OF OPERATOR: P. O. Box 2920 Casper, WY 82602

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 760' FSL, 1980' FWL (SE SW)
At proposed prod. zone: same

5. LEASE DESIGNATION AND SERIAL NO.: 14-20-603-353

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.: # 18-24

10. FIELD AND POOL, OR WILDCAT: Greater Aneth

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 18-T41S-R24E

12. COUNTY OR PARISH: San Juan

13. STATE: Utah

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: Approximately 4 miles south of Montezuma Creek, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 1980' East of Ratherford Unit lease Line

16. NO. OF ACRES IN LEASE: 2560 Acres

17. NO. OF ACRES ASSIGNED TO THIS WELL: 40 Acres

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: 1300' E of #18-14

19. PROPOSED DEPTH: 5700' Desert Creek

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 4724' Ungraded ground

22. APPROX. DATE WORK WILL START*: November 1984

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8"	48#	100'	150 sx (Circ to surface)
12-1/4"	9-5/8"	36#	1600'	600 sx (Circ to surface)
8-3/4"	7"	23# & 26#	5700'	1000 sx est. (T.O.C. approx 2000'

Approval is requested to drill Ratherford Unit #18-24, A Desert Creek Development oil well, to increase the ultimate recovery from the Ratherford Unit.

BOP equipment will be operated daily and tested weekly.

RECEIVED
SEP 27 1984
DIVISION OF OIL GAS & MINING

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
DATE: 10/10/84
BY: John R. Baza

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

24.

SIGNED A. E. Stuart TITLE Area Manager DATE Sept. 18, 1984

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

RATHERFORD UNIT #18-24

Supplement to Form 9-331C "Application for Permit to Drill, Deepen, or Plug Back."

DRILLING PROGRAM

1. Surface formation is the Dune Sand, which consists of loose windblown sand, age-recent.

   Estimated tops of geologic markers:

Chinle	1450'
Shinarump	2285'
DeChelly	2585'
Hermosa	4490'
Desert Creek Zone I	5480'

2. Brackish water-bearing sands are expected in the Navajo, Wingate, and DeChelly formations. Oil is expected to be encountered in the Ismay and Desert Creek formations. The top of cement will be approximately at 2000'.

3. Blow-out preventers will be 10" Series 900 equipment to be tested initially to 3000 psi. They will be inspected and operated daily and pressure tested weekly to 1500 psi. Weekly pressure tests will be supervised by representatives of Phillips Oil Company and the drilling contractor. Tests will be recorded on the daily drilling report which will remain on the rig floor during drilling operations. BOP tests will be conducted in accordance with Phillips standards, copy attached.

4. a. Proposed Casing Program:

   1. Conductor casing:

100'	13-3/8"	48#/ft	H-40	ST&C	new

   2. Surface casing:

1600'	9-5/8"	36#/ft	K-55	ST&C	new

      Surface casing will be tested to 1500# before drilling out.

   3. Production casing:

5700'	7"	23# & 26#/ft	K-55	ST&C	new

      Production casing will be tested to 3000#.

COMPANY PHILLIPS OIL COMPANY

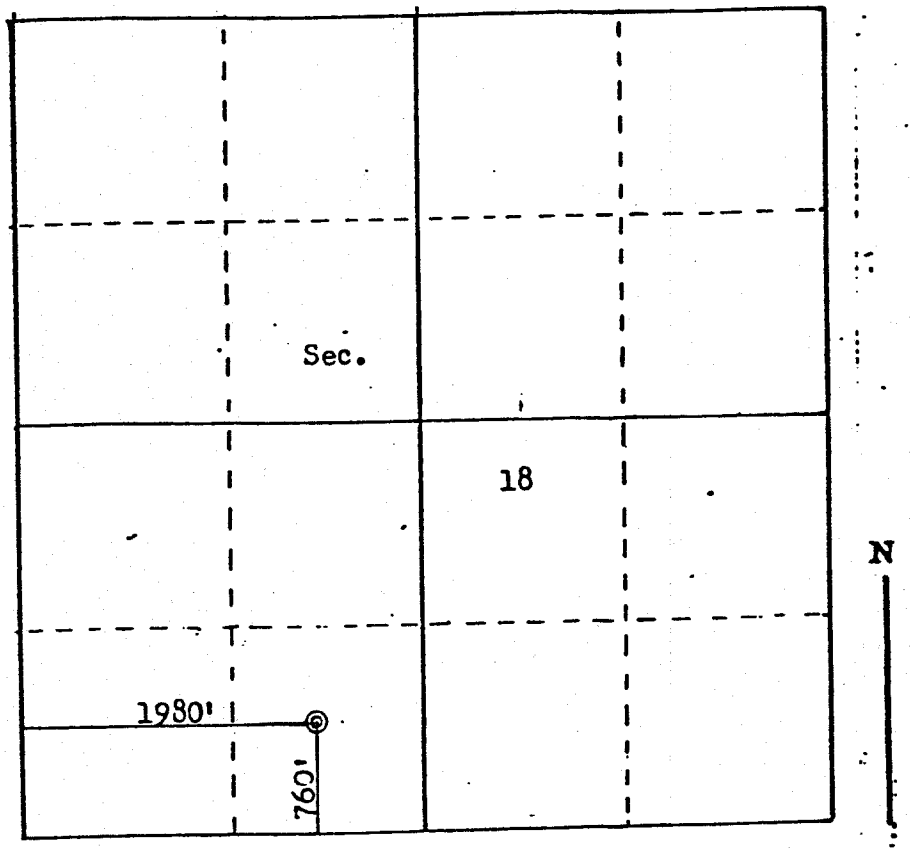
LEASE RATHERFORD UNIT WELL NO. 18-24

SEC. 18, T. 41S, R. 24E

San Juan County, Utah

LOCATION 760' FSL 1980' FWL

ELEVATION 4724 ungraded ground



SCALE—4 INCHES EQUALS 1 MILE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTE OF ACTUAL SURVEYS MADE BY ME UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

SEAL

Registered Land Surveyor.
#3950
FRED S. KERR, JR.

SURVEYED May 15, 19 84

FARMINGTON, N. M.

b. Proposed Cementing Program:

1. Conductor Casing:

Conductor casing will be cemented with 150 sks Class B cement. Cement will be brought to surface.

2. Surface Casing:

Surface casing will be cemented with 300 sks "light" cement followed with 300 sks Class B cement. Cement will be brought to surface.

3. Production casing:

Production casing will be cemented with "light" cement followed with Class B cement. For cement volume, caliper will be used with 15% excess. The top of the cement should be around 2000'. If other zones with hydrocarbon potential are encountered, they will be covered with cement.

c. Auxiliary Equipment:

Auxiliary equipment will include upper and lower kelly cocks, a drill string safety valve, and a pit level indicator.

5. Drilling Fluid:

Drilling fluid will be a fresh water based mud system. Spud mud is gel and water with a weight of 8.4-8.8 ppg. From the surface to approximately 1600', gel and water will be used. Mud weight may be up to 9 ppg to control water flow from the Wingate formation. A slurry of 8.6-9.5 ppg, 32-38 viscosity, and less than 15cc/30 min. water loss will be used from 1600'-5200'. Mud weight may be increased to 10.4 ppg if a water flow is encountered. From 5200' to total depth mud properties will be 10.5-12.5 ppg, 40-45 viscosity, and below 10 cc water loss.

Adequate quantities of mud materials will be stored at the location to equal the volume of the rigs complete circulating system. A flow sensor will be used.

6. Testing, logging, and coring:

The logging program will consist of DLL, GR, SP, and Caliper from T. D. to the surface casing. A FDC/CNL and a Micro-proximity log will be run from T. D. to 4300'. A temperature or cement bond log will be run to determine cement top. No coring or drill stem tests are planned.

7. Downhole Conditions:

Drilling in the area indicates no abnormal pressures, temperatures, or hydrogen sulfide gas.

8. Phillips anticipates starting operations in November 1984. Drilling operations are estimated to take fifteen days per well.

CULTURAL RESOURCE REPORT

San Juan College has prepared a cultural resource inventory of the subject wellsite. A copy of the report has been sent to the BLM Farmington office. Pertinent information regarding the subject well is attached.

SURFACE USE PROGRAM

1. Existing Roads

   a. Access to existing lease roads is approximately 4 miles south of Montezuma Creek, Utah.

   b. The existing roads will be maintained in the same or better condition.

   c. Refer to the attached access road map for road information.

2. Access Roads

   Planned upgrading of existing access roads is shown on the attached map.

3. Location of Existing Wells.

   Locations of existing wells are shown on the attached maps.

4. Production from the proposed well will be piped to Ratherford Unit Tank Battery #1, located in the SW SW Sec. 16-T41S-R24E San Juan County, Utah. The flowline will be visible from the existing lease roads. A plat of the proposed leadline is attached.

5. Water Supply

   a. The source of water to drill the subject well is from the River Booster, NE/4 Sec. 5., or from the Water Injection Plant, SE/4 Sec. 17 in T41S-R24E, San Juan County, Utah.

   b. The drilling water will be trucked from the water source to the subject well.

   c. A water supply well will not be drilled on the lease.

6. Construction Materials

   a. Only native soils will be used for construction of wellsite and the access road.

b. Pit run rock will be used on the wellsite and access road when needed.

c. The above materials are owned by the Navajo Tribe.

7. Waste Disposal

a. Cuttings: Cuttings will be contained in a fenced unlined reserve pit until dry enough to cover. Upon abandonment, the reserve pit area will be backfilled, shaped to natural topography, and seeded.

b. Drilling Fluid: Drilling fluid will be contained in a fenced unlined reserve pit until dry enough to cover. Upon abandonment, the reserve pit area will be backfilled, shaped to natural topography, and seeded.

c. Garbage/Trash: All garbage and trash will be put in the burn pit. The burn pit will be fenced on four sides. After the burn pit is no longer in use, the trash and garbage will be covered with a minium of 4 feet of fill.

d. Salt: No salts are anticipated on this well. If salt is present, it will be disposed of in the reserve pit.

e. Chemicals: Chemicals will be disposed of in the reserve pit.

f. Sewage: Dry chemical toilets will be used.

8. Ancillary Facilities

No ancillary facilities are required.

9. Well Site Layout.

a. Refer to attached Rig Layout plat

b. There are no plans to line the reserve pit unless porous soil materials are encountered during construction.

10. Surface Reclamation Plans

a. Construction Program: A cross section of the drill site showing cuts and fills is attached.

b. Well Abandonment: All disturbed areas will be shaped to the natural topography and seeded in accordance with BLM requirements.

c. Producing Well: Those areas not needed for production purposes will be recontoured to the surrounding topography. Seeding will be in accordance with BLM requirements.

d. Pipelines and flowlines: Flowlines will be above ground and follow existing roads.

e. Rehabilitation will begin as soon as possible, considering weather and other factors, and proceed per recommendation of the BLM. The reserve pit will be reclaimed once it dries.

11. Surface Ownership: The wellsite location, access road and leadline are on the Navajo Indian Reservation. No dwellings are in the proposed drilling area.

12. Other information:

The reserve pit will be fenced on three sides during drilling and on the fourth side after the rig is moved out.

13. Operator's Representative and Certification.

a. Field Representative:

A. E. Stuart
P. O. Box 2920
Casper, Wyoming 82602
307-237-3791

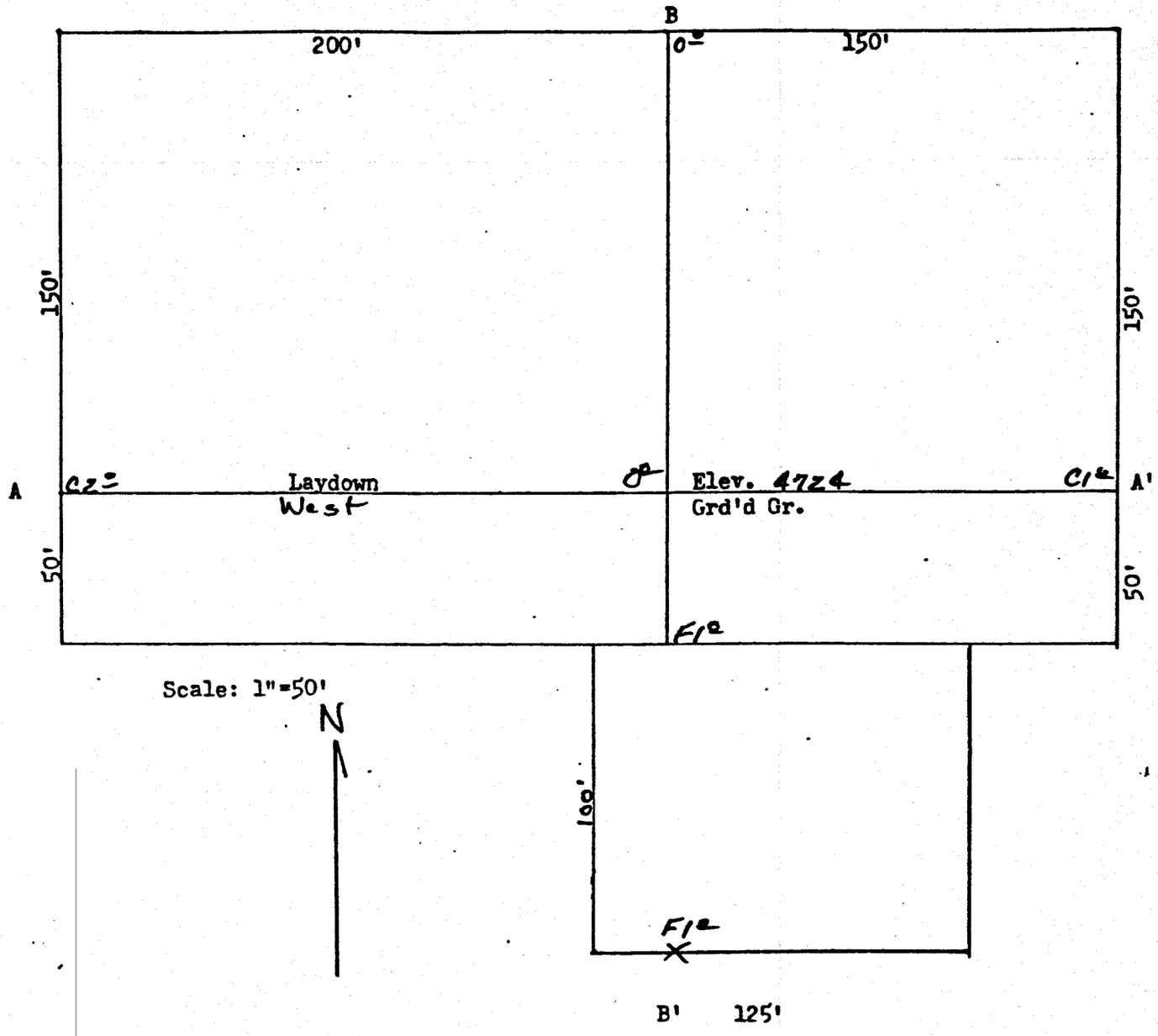
I hereby certify that I or persons under my direct supervision have inspected the proposed drill site and access route; and I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge true and correct; and that the work associated with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

Date 9/24/84

A. E. Stuart
Area Manager

BJM/fb (18)
Casper - RC

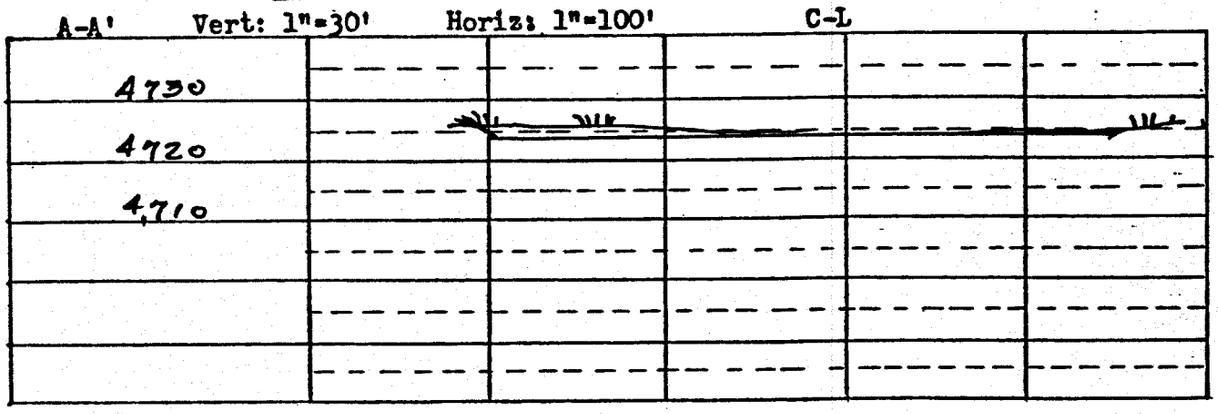
Profile for
PHILLIPS OIL COMPANY #18-24 RATHERFORD UNIT
760' FSL 1980'FWL Sec. 18-T41S-R24E
SAN JUAN COUNTY, UTAH



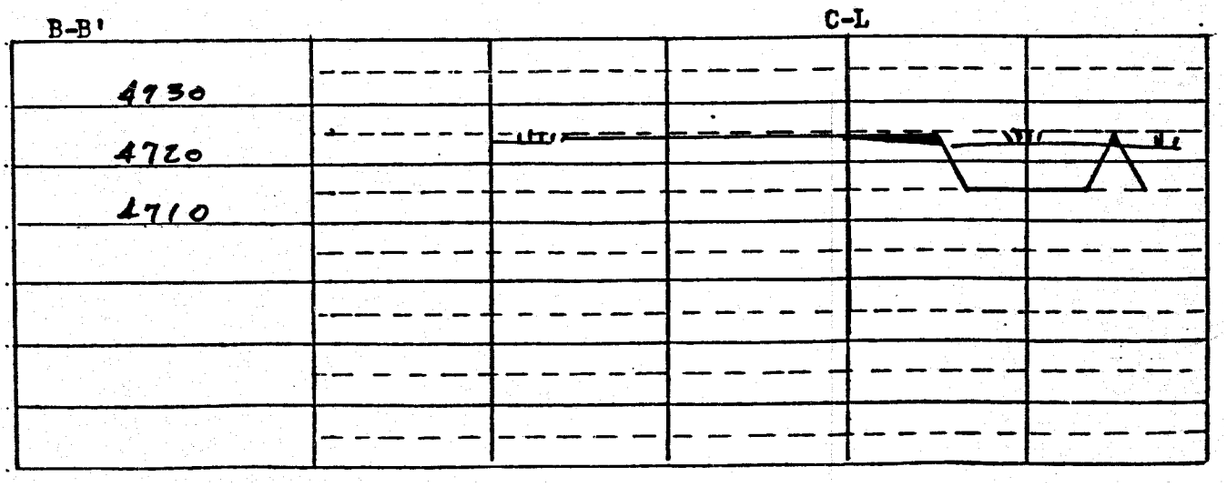
Scale: 1"=50'

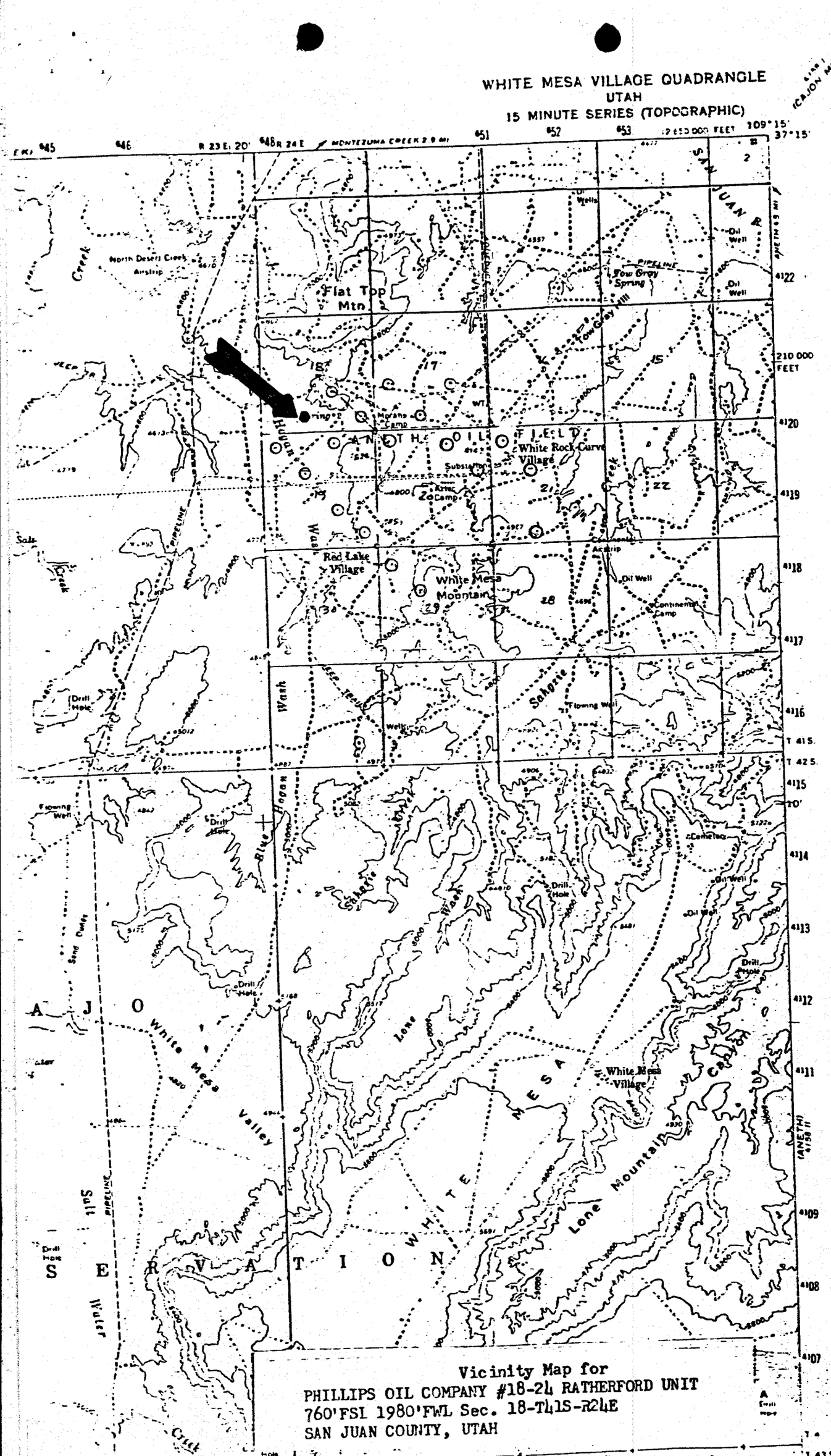
N

A-A' Vert: 1"=30' Horiz: 1"=100' C-L



B-B' C-L

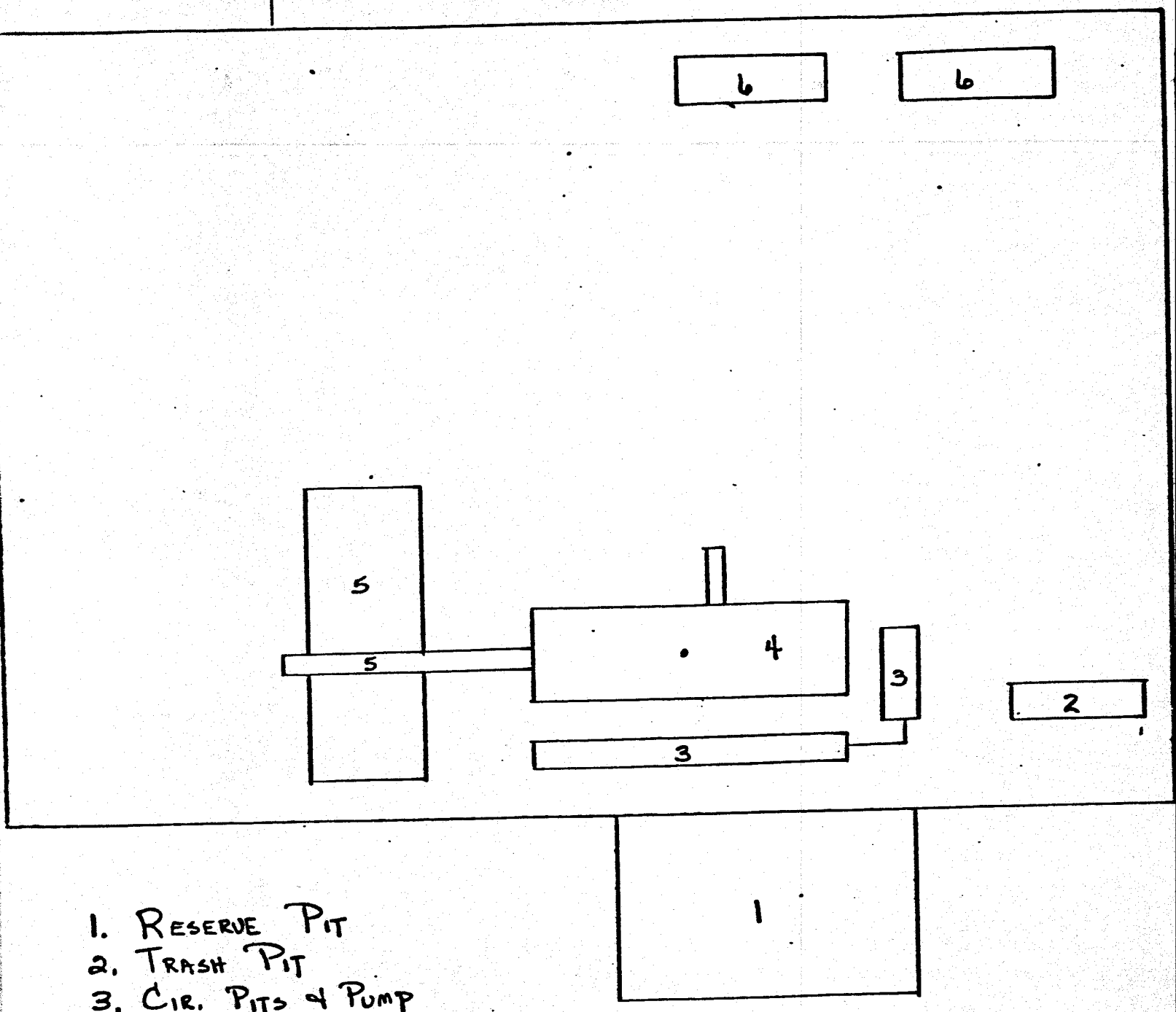




Vicinity Map for
PHILLIPS OIL COMPANY #18-24 RATHERFORD UNIT
760'FSL 1980'FWL Sec. 18-T41S-R24E
SAN JUAN COUNTY, UTAH

RATHERFORD UNIT # 18-24

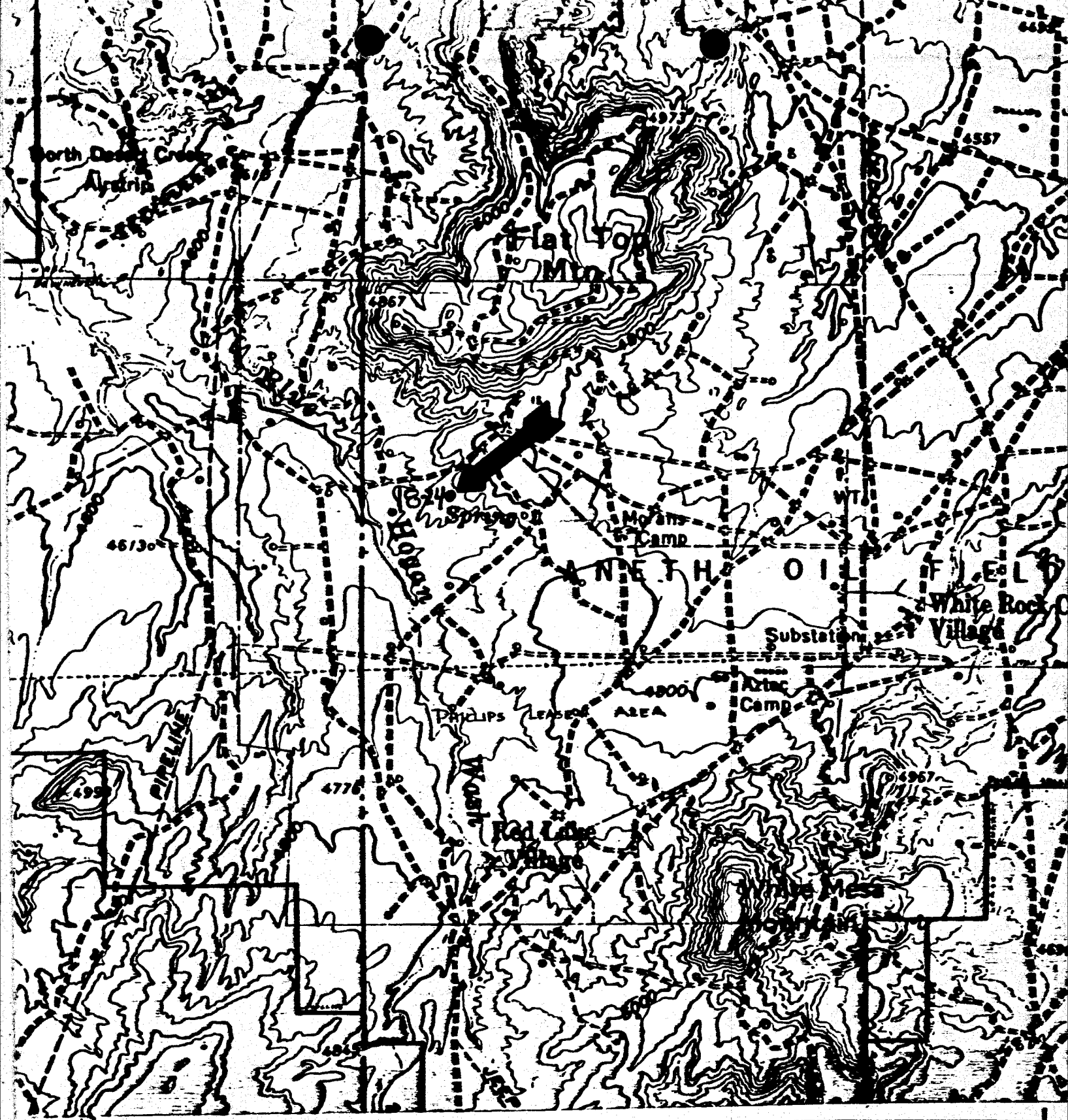
SE SW SEC. 18 T41S-R24E



1. RESERVE PIT
2. TRASH PIT
3. CIR. PITS & PUMP
4. RIG
5. CAT WALK & PIPE RACKS
6. TRAILERS

DRILLING RIG LAYOUT

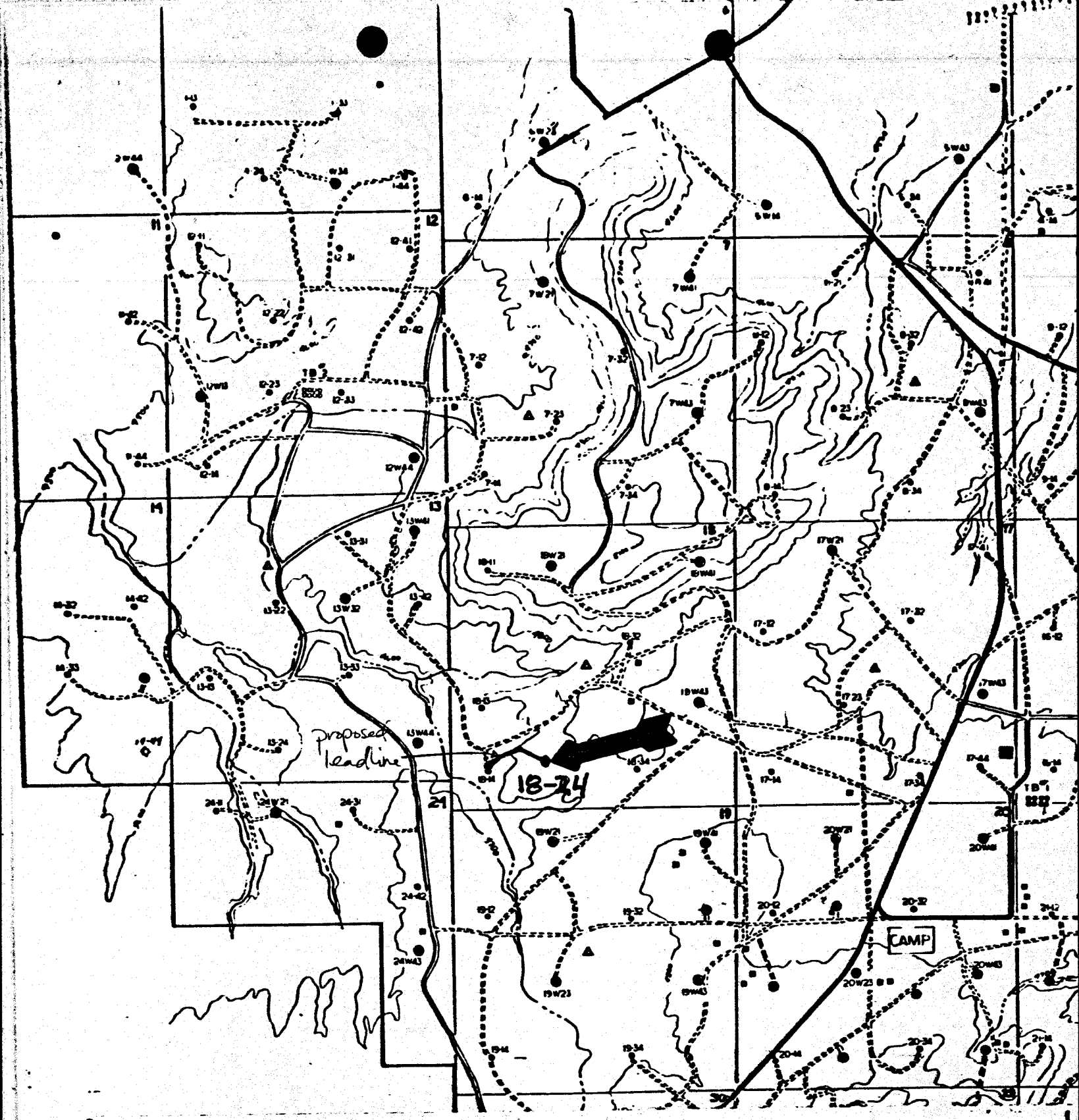
OUTLINE OF LOCATION APPROXIMATELY 300' x 350'
NOT TO SCALE.



NO.	REVISION	BY	DATE	CHKD	APP'D

FOR BIDS	PHILLIPS PETROLEUM COMPANY	JA NO.	FILE CODE
FOR APPR	BARTLESVILLE, OKLAHOMA	AFE NO.	SCALE 2.2"=1mi
FOR CONST	RATHERFORD UNIT WELL 18-24 PROPOSED SE SW SEC. 18 T41S-R24E SAN JUAN CO., UTAH	DWG NO	
DRAWN 7-20-84 BJM		SH NO.	
CHECKED			
APP'D			

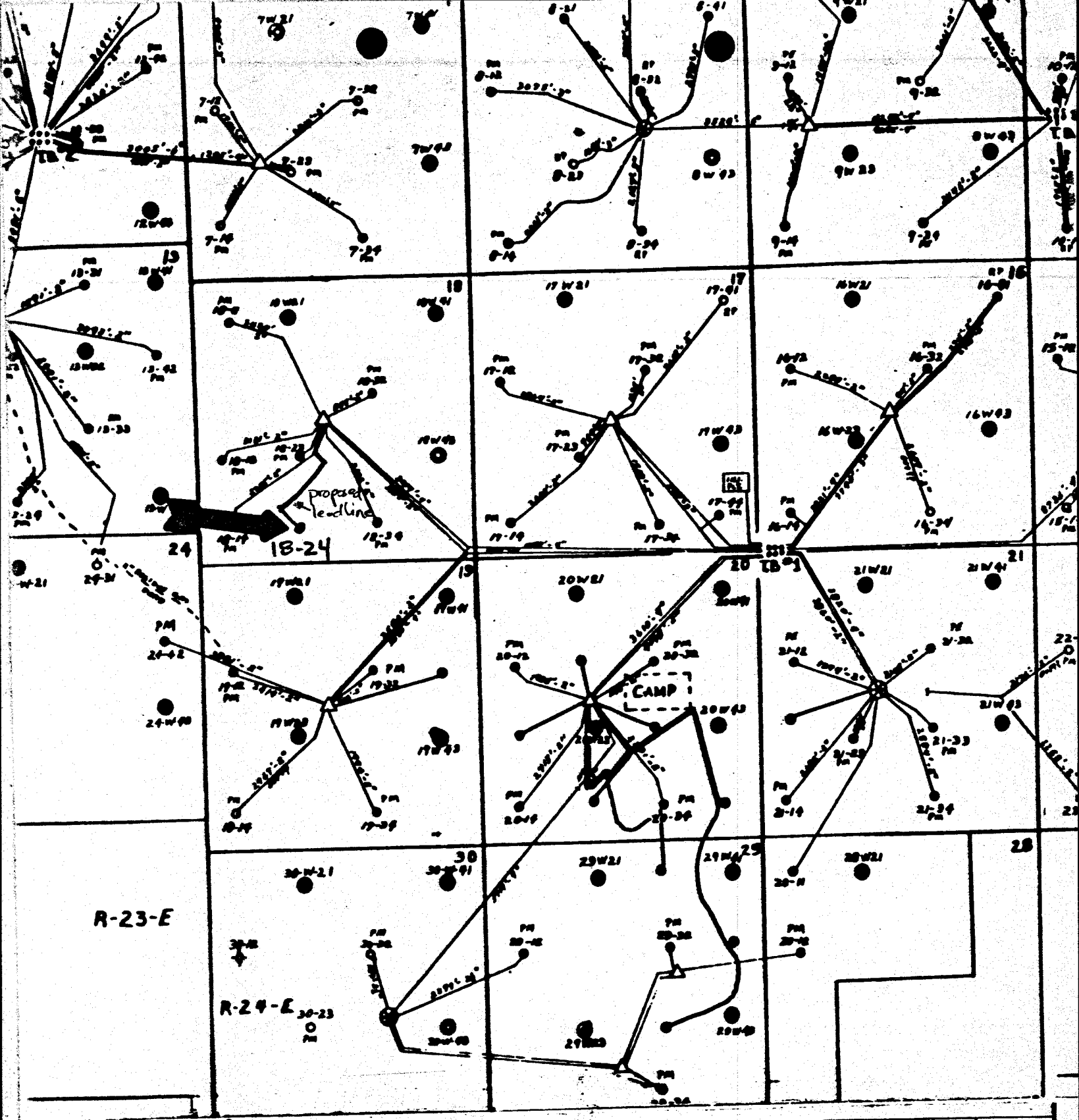
FORM 3770-5 8-81



NO.	REVISION	BY	DATE	CHKD	APP'D
1	Relocation of Proposed road	BJM	8-15-84		

FOR BIDS	PHILLIPS PETROLEUM COMPANY	JA NO.	FILE CODE
FOR APPR	BARTLESVILLE, OKLAHOMA	AFE NO.	SCALE
FOR CONST	RATHERFORD UNIT WELL 18-24 PROPOSED ROAD PLAT SE SW SEC 18 T41S-R23E SAN JUAN CO., UTAH	DWG NO.	
DRAWN BJM		SH NO.	
CHECKED			
APP'D			

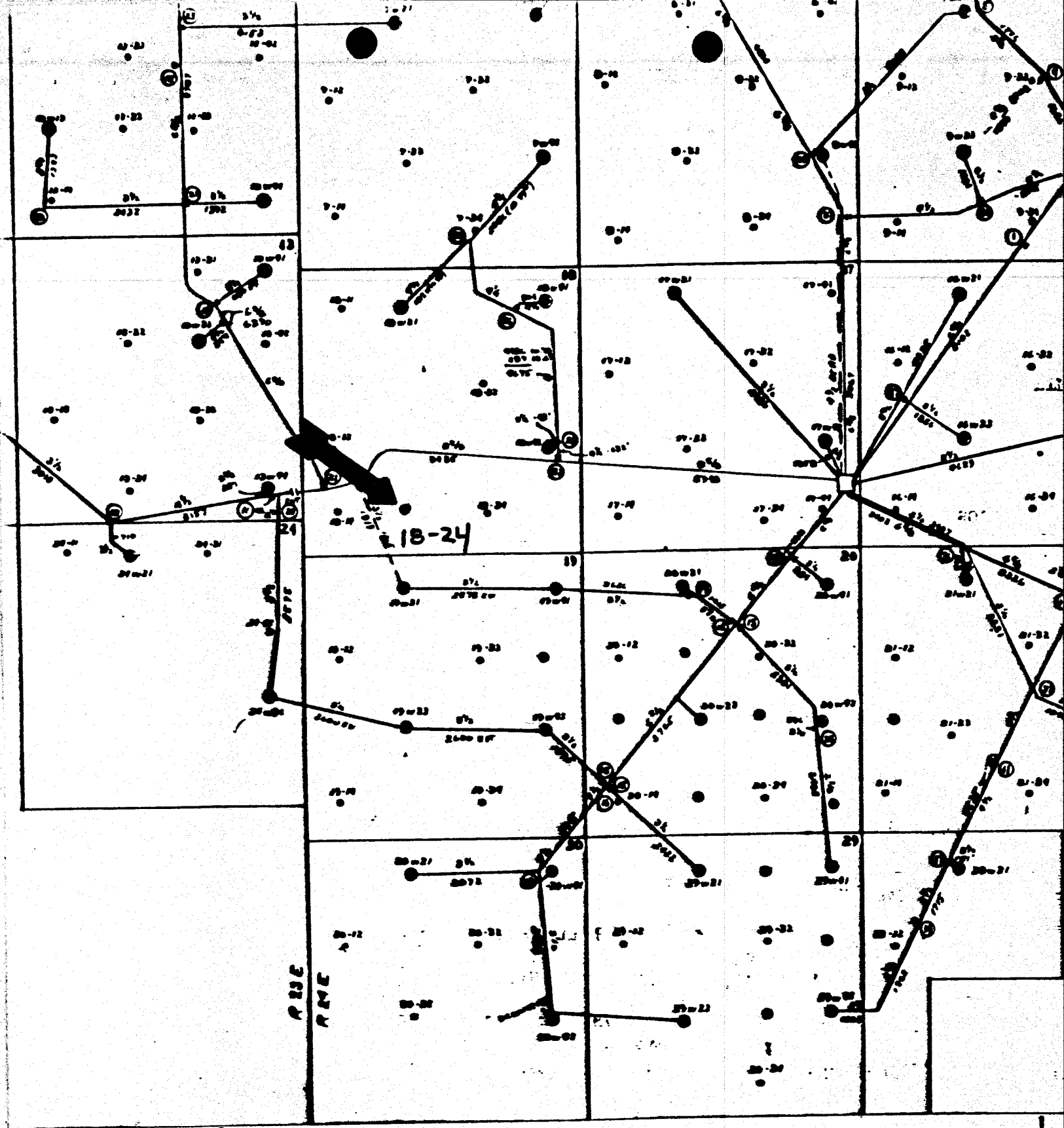
FORM 1779-S 8-81



NO.	REVISION	BY	DATE	CHKD	APP'D
1	Relocation of proposed leadline	BJM	8-15-84		

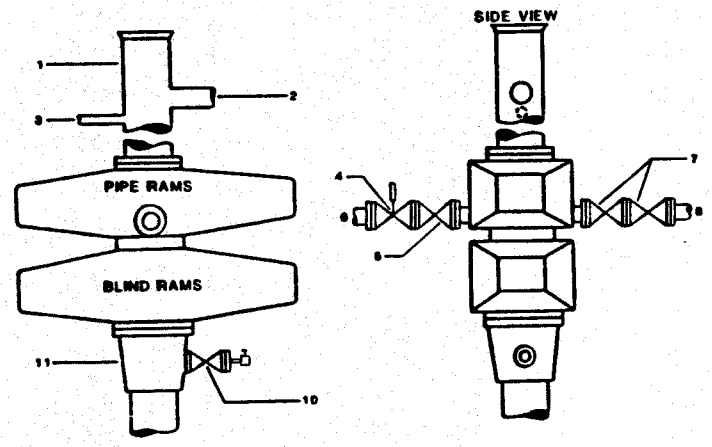
FOR BIDS	PHILLIPS PETROLEUM COMPANY	JA NO.	FILE CODE
FOR APPR	BARTLESVILLE, OKLAHOMA	AFE NO.	SCALE 2.2"=1mi
FOR CONST	RATHERFORD UNIT WELL 18-24 PROPOSED LEADLINE PLAT SE SW SEC. 18 T41S-R24E SAN JUAN CO., UTAH	DWG NO.	
DRAWN 7-20-84 BJM		SH NO.	
CHECKED			
APP'D			

FORM 1779-S 8-81



NO.	REVISION	BY	DATE	CHKD	APP'D

FOR BIDS	PHILLIPS PETROLEUM COMPANY	JA NO.	FILE CODE
FOR APPR	BARTLESVILLE, OKLAHOMA	AFE NO.	SCALE 2.2"=1mi
FOR CONST	RATHERFORD UNIT WELL 18-24 INJECTION LINES SE SW SEC. 18 T41S-R24E SAN JUAN CO., UTAH	DWG NO.	
DRAWN 7-20-84 BJM		SH NO.	
CHECKED			
APP'D			



1. BELL NIPPLE
2. FLOW LINE
3. FILL-UP LINE
4. 2" FE PRESSURE-OPERATED CHOKE LINE VALVE
5. 2" FE GATE VALVE
6. 2" FE CHOKE LINE TO MANIFOLD
7. 2" FE GATE VALVES
8. 2" FE KILL LINE
10. 2" SE OR FE GATE VALVE WITH NEEDLE VALVE
11. CASING HEAD HOUSING

Figure 7-10. Standard Hydraulic Blowout Preventer Assembly (2 M or 3 M Working Pressure) Alternative 3 (without Drilling Spool)

7.6 Testing Surface Blowout Preventer Equipment

7.6.1 Pressure Test Frequency

All rams, annulars, valves, choke and kill lines, choke manifold, kelly cocks, and safety valves shall be pressure tested at the following frequencies:

(1) Initial installation of blowout preventers.

(2) After setting casing, before drilling cement.

(3) Every 7 days or on first trip out of hole after 7 days since previous pressure test.

(4) After any component of the blowout preventer assembly is disturbed, replaced or repaired (this includes lines, valves, or choke manifold). In this case, the component changed may be the only component tested.

(5) Prior to conducting first drill stem test in a series of one or more DST's.

(6) Any time the Phillips Wellsite Supervisor deems necessary, such as prior to drilling into suspected high pressure zones.

7.6.2 Function Test Frequency

All rams, annulars, valves, and other items specified below, shall be function tested at the following frequencies.

(1) On initial installation from driller control and remote panel.

(2) Each trip out of hole alternating between driller's and remote control panel but not more than once every twenty-four (24) hours. Close pipe rams or annular preventer ONLY on drill pipe.

7.6.3 Test Pressures

Use the following table to identify which test is appropriate and at what pressure.

TEST	DESCRIPTION
Low Pressure	Test to 200-300 psi prior to each high pressure test.
Initial Installation	Test all rams, annulars, valves, choke manifold, kelly cocks, and safety valves to the lesser of the following pressures. . Rated working pressure of the component in the blowout preventer assembly with the exception of annular preventer which is to be tested to 70% of the rated working pressure. . The API rated casing burst pressure of the last casing to be utilized in the well with the BOP assembly being tested. . Rated working pressure of the casing head. . If "Cup Tester" is used do not exceed 80% of the API rated burst pressure of the casing.
Repair	Repaired or replaced components are to be tested to the same pressures used in the Initial Test.

7.6.3, cont'd

TEST	DESCRIPTION
Weekly and After Setting Casing	Test all rams, annulars, valves, choke and kill lines, choke manifold, kelly cocks, and safety valves, to the lesser of the following pressures. . 50% of the rated working pressure of the component to be tested. . 80% of the API rating of the casing burst pressure then in the well. . Test blind rams during internal casing pressure test. (Refer to drilling program for test pressures).
DST Operations	Test all pipe rams, annular preventers, valves, choke and kill lines, choke manifold, kelly cocks, and safety valves to the maximum anticipated surface pressure expected while conducting drill stem tests. Do not test annular to more than 70% of its working pressure.
Shallow Casing	Where cased hole is less than 2000 feet measured depth, the test pressure may be 1.5 psi per foot of casing depth, not to exceed 80% of the API rated burst pressure. In the case of shallow conductor casing or drive pipe (500 feet or less) that is equipped with one BOP, then the test pressures do not need to exceed 1.0 psi per foot of casing depth.
Accumulator	Test accumulator to the manufacturer's rated working pressure. Test the accumulator for time to pump up to specifications.

7.6.4 Blowout Preventer Test Practices

(1) All pressure tests shall be witnessed by Phillips' Representative and the Contractor's Senior Supervisor on Location. All tests shall be recorded on the Phillips' Daily Drilling Report, the IADC Report and the BOP Test Form; see Figure 7-13. A reproducible copy of the BOP Test Form (Figure 7-13) can be found in Section III.

7.6.4, cont'd

(2) Hold all low pressure tests for three minutes and high pressure tests for five minutes or until Phillips Representative and the Contractor's Senior Supervisor are satisfied no leaks exist.

(3) A detail procedure for the testing of blowout preventer and choke manifold equipment will be included in the drilling programs. The procedure is to be distributed for each drilling unit under contract by the operating office. Each operating office must include the following practices:

a. Prior to testing, all lines and valves will be thoroughly flushed to ensure the system is clear. Test all opening and closing control lines to 1500 psi and inspect for leaks.

b. If necessary, run a stand of drill collars below the test plug to prevent unseating the test tool during testing.

c. All precautions must be taken to avoid pressuring the casing below the test tool.

d. The running string is to be full of water (or antifreeze solution) for immediate indication of test tool leakage.

e. All pipe rams, blind/shear rams, blind rams, annular preventers, valves, fail-safe valves, choke and kill lines are to be tested at the frequencies and pressures outlined in this section.

f. Drill pipe safety valve, lower and upper kelly cocks are to be tested from below at pressures and frequencies outlined in this section.

g. All test fluids are to be bled back to the pump unit in safe manner.

7.6.5 Testing Wellhead Pack-offs

The wellhead pack-off is to be pressure tested upon installation for five minutes. Test pressure is to be 80% API rated casing collapse or the rated working pressure of the casing head whichever is the lesser. Casing annulus valve(s) must be in open position to prevent casing collapse during pack-off testing.

When testing the wellhead pack-off, use recorded test pressures and volumes to determine if pack-off is leaking. Pressure should be immediately released at the first indication of a leak.

7.6.6 Safety Precautions

One pumping unit operator is to be stationed at the high pressure pumping unit, and is to remain at this station until all testing has been completed. The pump unit operator is to be in continuous communication with the person who is recording the test data. The Phillips Wellsite Supervisor and Contractor's Senior Supervisor on location will be the only personnel who will go into the test area to inspect for leaks when the equipment involved is under pressure. The rig crews are to stay clear of the area until such time that both the Phillips Wellsite Supervisor and the Contractor's Senior Supervisor have contacted the pumping unit operator and all three have agreed that all pressure has been released, and there is no possibility of pressure being trapped. The rig crews may then go into the area to repair leaks or work as directed.

All lines, swings, and connections that are used in the testing of the blowout preventers are to be adequately secured in place.

Pressure is to be released only through the pressure release lines that are vented back into the pump unit tanks. The lines are to be clamped down to direct the flow into unit tanks.

Cultural Resources Management Program

San Juan College

Archaeological Surveys of
Six Proposed Well Locations and Associated Flow Lines and Access Routes
in San Juan County, Utah,
Conducted for Phillips Petroleum Company

Report 84-SJC-071B

Federal Antiquities Permit 83-AZ/NM/UT-047 and
Navajo Nation Antiquities Permit #1984-4

June 13, 1984

Phillips Petroleum Company - Ratherford Unit:

17-33
18-24
18-33
19-11
19-44
21-22

A Cultural Resources Inventory Prepared by Kristin Langenfeld, Archaeologist, Under the Supervision of Dr. Richard P. Watson, Director, Cultural Resources Management Program, San Juan College, Farmington, New Mexico

FRONTISPIECE

Scale 1: 250,000

Project Location

Report 84-SJC-071B

ABSTRACT

On May 21, 22 and 23, 1984 a Class III Archaeological Survey was conducted south of Montezuma Creek, San Juan County, Utah on lands to be used for nineteen proposed well locations, associated access routes and flow lines. A total of eight archaeological sites and eleven isolated occurrences were located during the inspections. This report details the results of archaeological surveys on six of the proposed locations. Approximately 19 hectares (47 acres) in Sections 17, 18, 19 and 21 were inspected for cultural resources in conjunction with the project areas described in this report. A total of eight sites and five isolated occurrences were located. Three sites are undated lithic scatters, four sites are Anasazi manifestations ranging from Basketmaker II-Pueblo III, and one site is Recent Navajo with a possible prehistoric component. Recommendations for management include avoidance of sites by restrictions on pad size and mechanical disturbance (four sites) and archaeological monitoring (two sites). One site is outside the project area and no avoidance or further mitigation is necessary.

The work was conducted by the:

Cultural Resources Management Program
San Juan College
4601 College Blvd.
Farmington, NM 87401-4699
Phone: 505/326-3311, Extension 344

The work was conducted under:

Federal Antiquities Permit 83-AZ/NM/UT-047 and
Navajo Nation Antiquities Permit #1984-4

The work was conducted for:

Phillips Petroleum Company

TABLE OF CONTENTS

LIST OF FIGURES

INTRODUCTION

On May 21, 22, and 23, 1984 Kristin Langenfeld and L. Jean Hooton, from the Cultural Resources Management Program, San Juan College, conducted a Class III Archaeological Survey for Phillips Petroleum Company. The survey was conducted under Federal Antiquities Permit 83-AZ/NM/UT-047 and Navajo Nation Antiquities Permit #1984-4 on lands owned by the Navajo Nation. Mr. Max Isaacs, of Phillips Petroleum Company, accompanied the archaeologists during the inspection.

Nature of Proposed Land Modifications

Land modifications proposed by Phillips Petroleum for the Ratherford Unit include the construction of well locations and, in some cases, access routes. These activities will constitute the major mechanical disturbances in the area. In addition, aboveground flow lines connecting each well with a local gathering station will be laid. These lines usually parallel either existing or proposed roads and will be laid from the road. Mechanical disturbance connected with flow lines will be minimal. Access routes, where required, will either follow existing two-tracks or run cross-country. In a few cases existing, bladed roads will be modified to accommodate drill rigs. Well locations will be 350 feet x 350 feet (107 meters x 107 meters), including pits. Access routes will be 30 feet (10 meters) in width and flow lines will require a 10-foot-wide (3-meter) corridor. Combined flow lines and access routes will require a 40-foot (12-meter) right-of-way.

Methodology

A series of parallel transects spaced 10 to 15 meters apart was used to survey a 450-foot x 450-foot (137-meter x 137-meter) area for each well location. This includes a buffer zone of 50 feet (15 meters) around the perimeter of the project area.

Zigzag transects were used to survey 25-foot-wide (7.6-meter) flow line corridors. This includes a buffer zone of 7.5 feet (2.3 meters) on each side of the right-of-way. Zigzag transects were used to survey 75-foot-wide (23-meter) access or combined access and flow line routes. This includes a buffer zone of between 17.5 feet (5 meters) and 23 feet (7 meters) on each side of the right-of-way.

During the inspection, the presence of recent trash, recent features and existing disturbances within individual project areas was noted. Isolates were mapped relative to a known point using a Brunton compass and pacing. Locations of isolates were plotted on maps provided by Phillips Petroleum. When isolates were encountered, an area with a radius of at least 25 feet (8 meters) around the isolate was closely inspected for features and additional artifacts.

Sites located during the inspection were mapped in a similar manner.

In report preparation, UTM Coordinates were plotted from the USGS White Mesa Village, Utah, 15-Minute Quadrangle (Figure 2). Legal descriptions were made using maps enlarged from the 15-minute quadrangle (Figures 4-9). The project area is on unplatted land, therefore, some discrepancies occur between the two map scales.

PHYSIOGRAPHY AND ENVIRONMENT

The project locations are confined to an area 3.2 kilometers x 4 kilometers (2 miles x 2.5 miles) located approximately 8 kilometers (5 miles) south of Montezuma Creek, San Juan County, Utah. The area is bordered on the north by Flat Top Mesa and on the south by White Mountain Mesa. Blue Hogan Wash and Sahgzie Creek delineate the western and eastern boundaries, respectively (see Figures 1 and 2). Several zones differing in soils, vegetation, topography, terrain and elevation are represented within the survey area. The major characteristics of these zones are outlined below.

Zone A - Mesa Slopes

This zone is confined to the northern slopes of White Mesa Mountain. Terrain is broken and eroded with a slope of up to 32%. Soils are poorly developed and include locally sandy shallow soils on narrow benches and clayey soils with bentonite deposits in badland formations. Sandstone outcrops and exposed bedrock sandstone are common. Surface deposits include lag gravels and numerous sandstone spalls. Numerous arroyos dissect the slopes. Vegetation is generally sparse and includes rabbitbrush, shadscale, Russian thistle and prickly pear cactus. Ground cover ranges from 0% to 20%. Maximum elevation is approximately 1,570 meters (5,150 feet).

Zone B - Badland Formations

This zone includes erosional remnants of both sandstone capped badland hills and somewhat more extensive low mesa shaped remnants.

PROJECT AREA

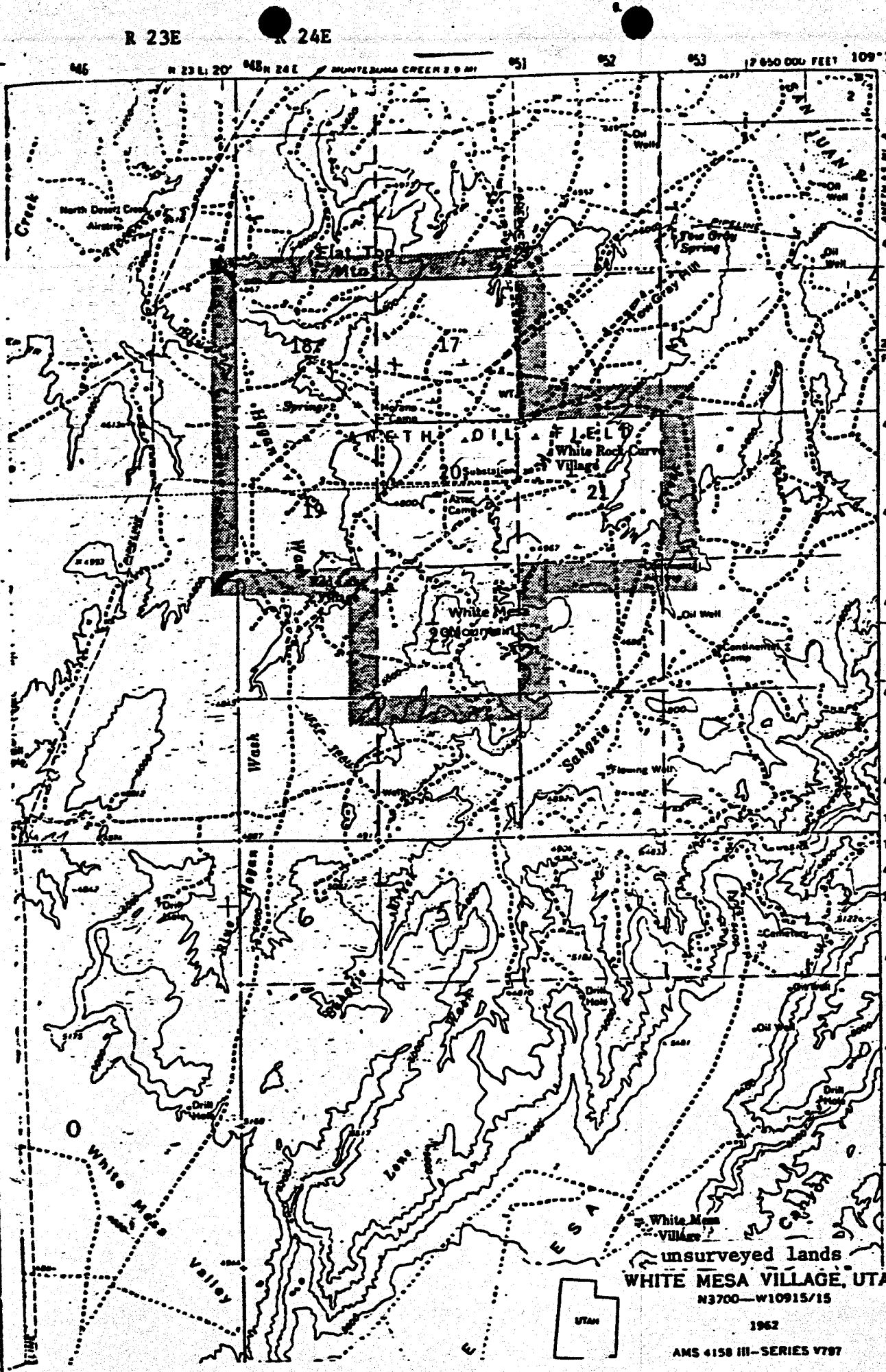


Figure 1 .
Report 84-SJC-071R

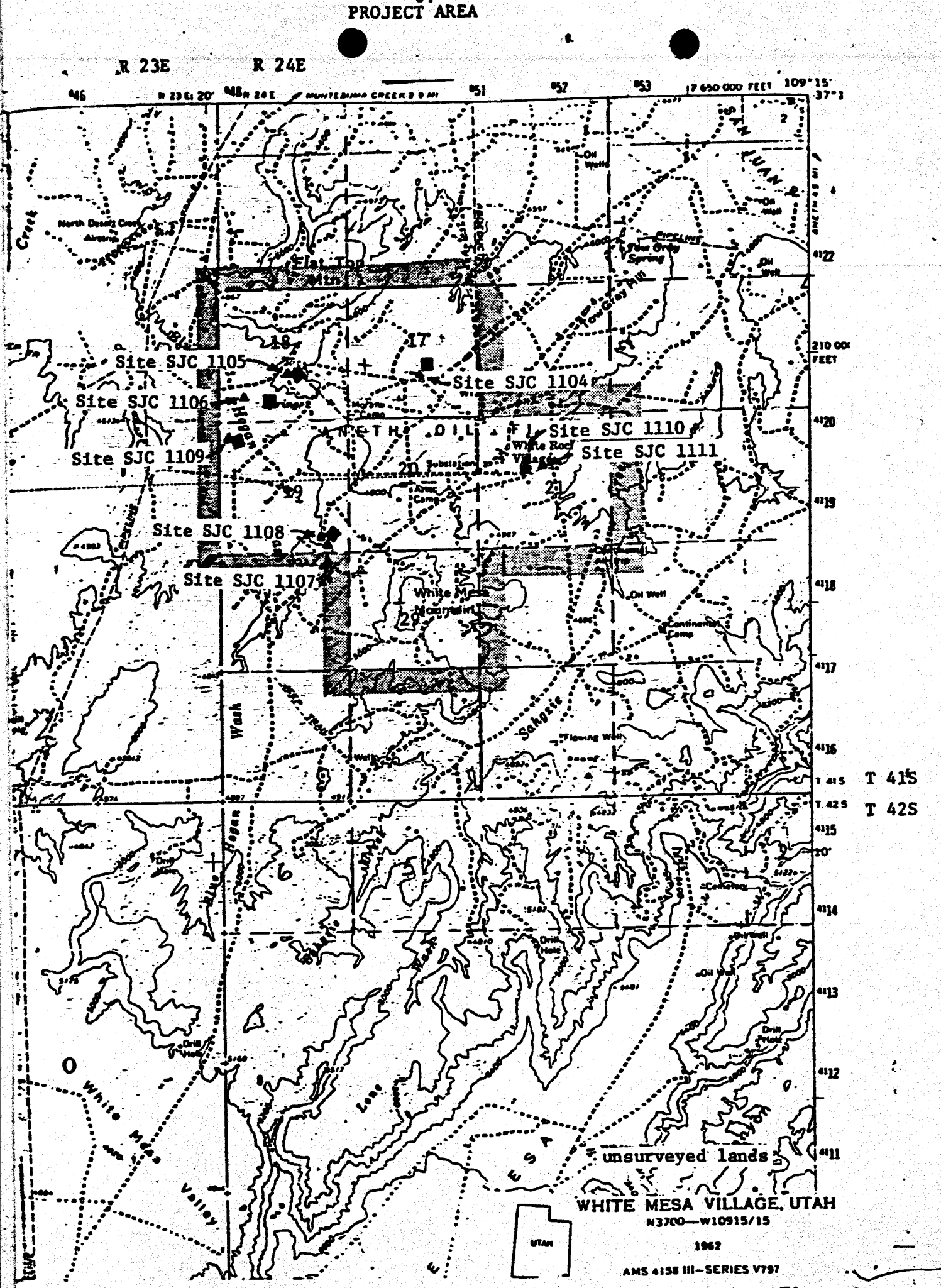


Figure 2

Report 84-SJC-0718

These formations are characterized by steep slopes frequently dissected by arroyos. Soils are generally clayey, shallow and poorly developed with localized bentonitic clay deposits common. In many areas broken, platy shale is exposed. Vegetation is generally quite sparse and limited to scattered snakeweed and grasses. Ground cover ranges from 0% to 20%. In general, the badland formations characterized by Zone B are similar to Zone A except that they are generally lower in elevation, averaging 1,433 meters (4,700 feet), and contain areas with shaley outcrops.

Zone C - Stabilized and Semistabilized Dunes

This zone characterizes the majority of the project locations. Dunes are found in a variety of topographic situations including ridges, arroyo bottoms and mesa tops and slopes. In some areas they are found on or adjacent to badland formations. Terrain ranges from level to rolling and gently rolling with blownout areas common. In some instances the blowouts have acted as seasonal catchments, as evidenced by surface clay deposits left behind as water evaporates or filters down. Soils within the dunal deposits are sandy to very sandy loams and are generally reddish-brown in color. The deposits range from shallow, where the old blowouts have exposed bedrock sandstone or shale, to quite deep. Entrenched arroyos through dunal deposits were noted to exceed 3 meters in depth in some places. Vegetation is of the desertscrub community and includes blackbrush, sagebrush, shadscale, ephedra, rabbitbrush, snakeweed, echinocereus, narrowleaf yucca, prickly pear cactus and Russian thistle. A wide variety of grasses and annuals is also represented and includes grama, galleta, ricegrass,

needle & thread, ring muhly, six-weeks fescue, brome, dropseed, crested wheat, alkali sacaton, globemallow, white asters and lupine. Not all species are represented in all areas and additional unidentified shrubs and grasses are present. Ground cover varies greatly from as little as 10% to as much as 80%. In general, elevations range between 1,425 meters to 1,479 meters (4,675 feet to 4,850 feet).

Zone D - Active Dunes

This zone includes those dunal deposits which are unstable and shifting. Topographic context is the same as for Zone C and active dunes are frequently associated with stabilized dunes. These dunes are long and rounded. Blowouts are common and the white sand of the active dunes displays characteristic wave patterns. The depth of the deposits is variable as with the stabilized and semistabilized dunes. Vegetation is limited to sparse, scattered grasses and low shrubs. Elevations are the same as for Zone C.

Discussion of Zones

No project areas described in this report are located in Zone A. Moreover, only portions of two project areas (Ratherford Units 17-33 and 18-24) are located in areas characterized by Zone B. All six of the project areas contain Zone C deposits and three have Zone D deposits in conjunction with semistabilized dunes. As indicated in the preceding description of the stabilized and semistabilized dunal deposits, these areas are all remarkably similar in terms of soils and terrain. They differ primarily in terms of topographic setting.

direction of slope and degree to which they have been dissected by erosion. The areas represented by Zone C are considered most likely to contain subsurface in-situ cultural materials; 75% of the archaeological sites and the overwhelming majority of the isolates were located in stabilized and semistabilized dune situations. The possibility of subsurface cultural remains with no surface indications in the deposits is acknowledged as quite real.

No project locations were located completely within the active dunes described as Zone D. Active dunes were encountered on portions of two of the project areas described in this report. Potential for cultural materials, with or without surface indications, within these deposits is also considered to be high. Both sites and isolates were located in Zone D. The major distinction between Zones C and D in terms of cultural resources is the likelihood that materials in Zone D are likely to be encountered only in blowouts and are much more likely to be out of context.

Water Sources

Within the project area water sources are generally limited to seasonally running washes, the largest of which are Blue Hogan Wash and Sahgzie Creek. The San Juan River is located approximately 3.2 kilometers (2 miles) northeast of the most easterly portions of the project area. Only one permanent water source, a spring in the southern half of Section 18, is shown on USGS maps. The presence of tamarisk in the southern portion of Section 21 along an east trending feeder of Sahgzie Creek suggests the existence of either an underground

water source or seasonally accumulating water. An earthen dam of relatively recent construction (now broken) is located on Blue Hogan Wash in the NW 1/4 of Section 19 and provided a relatively large catchment area. Tamarisk is present below the dam although no water was present at the time of the survey. In addition, as noted earlier, some catchments seasonally hold small amounts of water. A windmill in the SW 1/4 of Section 24, T. 41 S., R. 23 E., just west of the project area, and a flowing well in the NW 1/4 of Section 12, T. 41 S., R. 23 E., just west of the project area, are also used by local inhabitants for watering livestock. A few isolated, seasonal springs or seeps are reported in the area, however, their locations are not known.

Fauna

Little wildlife was seen within the project area during the archaeological inspection. Lizards were seen frequently and one cottontail rabbit was observed. Large and small rodent burrows were noted and coyote were heard during the survey of the slopes of White Mesa Mountain. According to Mr. Isaacs, hawks are also frequently seen in the vicinity of White Mesa Mountain.

Present Day Land Use

The project area is located in the heart of the Aneth Oil Field where extensive development related to energy exploration and production over the past twenty years has occurred. Well locations dot the area and numerous roads, powerlines, above and below ground pipelines and oil field camps are a direct result of this development.

The area is also used extensively by local Navajo families. Occupied and unoccupied houses and hogans occur frequently throughout the project area. Although no interviews were conducted with customary land users, due in part to the fragility of relations between oil companies and local Navajos, it was noted that the area is intensively utilized for grazing activities. Moreover, both functional sweat houses and the remains of sweat houses attest to the use of the area in ritual activity. In the absence of interviews, it is impossible to know whether sacred areas or graves are present within the project area. Nothing resembling grave sites was noted during the inspection of individual project locations.

RECORDS SEARCH

Prior to the initiation of fieldwork, a records search was conducted using information available at the Cultural Resources Management Program, San Juan College and the Navajo Nation Cultural Resource Management Program, Farmington Office, as well as through phone contact with both the Navajo Nation Cultural Resource Management Program, Window Rock, and several local contract archaeology firms.

Numerous large and small archaeological surveys and excavations have been conducted in southeastern Utah. The majority of these projects have been located north of the San Juan River to the north, northeast and northwest of the project area. Projects have been related to both large parcel inventory surveys (see for example Fike and Lindsay, 1976) and energy and economic development (see for example

Hewett, Powers and Kemrer, 1979; Berge, 1975; Langenfeld, 1982; Reed, 1983). Sites dating from the Archaic Period through recent Historic Periods have been documented.

Within the project area itself few sites have been documented. According to a contact at Phillips Petroleum, previous archaeological surveys in the Phillips Field had been conducted by Complete Archaeological Service Associates of Cortez. Only one site has been recorded by C.A.S.A., and it is a lithic scatter with diagnostic tools dated to the San Jose Phase of the Archaic Period (L. Hammack to R.P. Watson, personal communication). The site is located in the SE 1/4 of the NE 1/4 of Section 29, T. 41 S., R. 24 E. The site number is unknown and its location was plotted on Figure 3 by use of UTM's provided by Mr. Hammack of C.A.S.A.

Two additional sites within the Phillips Field have been documented by the Navajo Nation Cultural Resource Management Program (Martin, 1983). These sites are also located in Sections 29 and 16, T. 41 S., R. 24 E. UT-C-54-3 is described as a permanent Historic Navajo sheep camp with two corrals or lambing pens and possible hogan. UT-C-54-4 is an undated lithic scatter containing complete and broken flakes and burned sandstone. The locations of these sites were also plotted on Figure 3 on the basis of UTM's provided in the report. The actual site location in Section 16 is uncertain. On maps provided by Phillips Petroleum, a large site area is shown in the SW 1/4; however, it has not been determined if this site was recorded by Navajo Nation Cultural Resource Management Program or C.A.S.A.

According to Mr. Isaacs, the Navajo Tribal Utility Authority has worked on the Phillips Lease Area within the last year. In the absence of a known project number, however, it is not possible to obtain information concerning a cultural resource inventory related to the project (Joe Anderson, personal communication).

Three additional sites north of the project area and south of the San Juan River have been recorded by the Navajo Nation Cultural Resource Management Program. Those sites are briefly described below and were plotted on Figure 3 on the basis of information provided by the source listed:

UT-C-54-1: Post 1970 Navajo site (Phillip Stewart, personal communication).

UT-C-54-2: Lithic/ceramic/ground stone scatter located in blowouts; Anasazi, Basketmaker III-Pueblo I (Phillip Stewart, personal communication).

UT-C-54-5: Lithic scatter; undated (McEnany, 1984).

SJC-727: Rubble mound, lithics, ceramics.

None of the previously recorded sites will be impacted by the proposed land modifications.

Name: Ratherford Unit 18-24 (Figure 5)

Land Jurisdiction: Navajo Nation

Legal Description: The proposed well is located in the Center of the North 1/2 of the SE 1/4 of the SW 1/4 of Section 18, T. 41 S., R. 24 E., S.L.P.M., San Juan County, Utah. The center stake is 760 feet from the south line and 1,980 feet from the west line. The flow line will run from the SE 1/4 of the SW 1/4 to the NE 1/4 of the SW 1/4 to the NW 1/4 of the NW 1/4 of the SE 1/4 of Section 18. The access will run from the SE 1/4 of the SW 1/4 to the NE 1/4 of the SW 1/4 of the SW 1/4 of Section 18.

Elevation: 1,441 meters (4,724 feet)

UTM Coordinates: Well = Zone 12; 648,635 mE; 4,120,060 mN.
1st Access E-O-L = Zone 12; 648,200 mE; 4,120,200 mN.
Alternate Access E-O-L = Zone 12; 648,200 mE; 4,120,100 mN.
Flow Line Turn = Zone 12; 648,450 mE; 4,120,185 mN.
Flow E-O-L = Zone 12; 648,850 mE; 4,120,560 mN.

Actual Project Area: Well = 107 m. x 107 m. (350' x 350')
*Access = 12.2 m. x 580 m. (40' x 1,900')
Flow = 3 m. x 670 m. (10' x 2,200')
TOTAL: 2.0 hectares (5.1 acres)

*includes alternate

Actual Survey Area: 137 m. x 137 m. (450' x 450')
23 m. x 580 m. (75' x 1,900')
7.6 m. x 670 m. (25' x 2,200'
TOTAL: 3.7 hectares (9.2 acres)

Physiography and Environment:

The proposed well is located in a rincon surrounded by Zone B badland formations. Outcrops of both sandstone and shale are common and the terrain is broken and eroded. Numerous west trending ephemeral washes and slightly entrenched arroyos cross the proposed location. The southeastern portion of the access and flow line proceed cross-country over stabilized and semistabilized dunes. The flow line proceeds in an easterly direction along an existing pipeline road (not

visible on Figure 5), up a steep slope with sandstone outcrops and localized dunal deposits. On the northeast side of the ridge the flow line parallels an existing road with both semistabilized and active dunes. The proposed access proceeds west along the pipeline road through semistabilized rolling dunal deposits and joins an existing well access. These deposits continue in a generally uninterrupted fashion south of the access. North of the proposed access stabilized dunes give way to active dunes which quickly fall off into a feeder of Blue Hogan Wash.

Cultural Resources:

One archaeological site, SJC-1106, and one isolate were located in the project area. Both are located in Zone C dunal deposits. I.O. #3, located toward the southern terminus of the proposed access route, is an isolated, unretouched flake. Additional locational and descriptive information is provided in Table 1. SJC-1106 is a lithic scatter possibly dating to between the Basketmaker II-Pueblo I Periods. The site is fully described on the attached Site Form. As indicated by Figures 5 and 10, the site is located in and adjacent to an existing, bladed road and underground pipeline. This existing road constitutes the preferred access route. Use of the existing road as an access for the 18-24 well location would require additional blading. At the time of the inspection an alternate access route, the proposed centerline of which skirts the southern site boundary by approximately 20 meters, was flagged (Figures 5 and 10). This alternate constitutes the second choice of an access. The alternate access would rejoin the existing pipeline road east of the site.

Recommendations:

Based on topography, terrain and cultural resources, there appear to be several options for choice of an access route. The options are summarized below:

1) Access can follow the existing pipeline road over the site.
2) Access can be rerouted to the south and avoid surface artifacts on Site SJC-1106.
3) Access can follow the flow line from the east.
4) A totally new access can be inspected.

Due to the nature of topography and terrain, Option #3, to follow the flow line, appears least feasible. Terrain is rugged and the southwest facing ridge slopes are steep. To make this route accessible to large vehicles would require a great deal of construction activity and would be likely to create both visual impacts and increased erosion.

Topography and terrain also limit the feasibility of Option #4, a completely new access route. Steep ridges and arroyo cuts would make access from the northeast of the site difficult and would appear to have effects similar to those noted for Option #3.

Option #2, reroute of a portion of the access cross-country south of the site, is more viable environmentally. The slope of the terrain and level to gently rolling nature of the dunal deposits suggest such a reroute would be generally less visible and scarring to the landscape. There is no guarantee, however, that subsurface cultural materials will not be encountered during construction in this area. As indicated by Figure 10, cultural materials now visible on the surface appear to have

been exposed by blading and trenching activities. Since few artifacts are visible on the surface outside the disturbed areas, the extent of subsurface cultural deposits is unknown. The primary concern with this option is the possibility that previously undisturbed cultural materials related to SJC-1106 may be impacted during construction. For this reason an archaeological monitor of construction of the cross-country portion of the access route would be recommended in conjunction with Option #2.

Option #1 would produce the least new environmental impacts because it would involve only improvement (i.e. widening) an existing road. This option will, however, directly impact Site SJC-1106. New impacts will be limited almost exclusively to previously disturbed areas. Surface artifacts will be bladed away and there is a high probability that additional subsurface cultural remains will be encountered although the potential depth of cultural deposits is unknown. In the event of Option #1, additional site mapping, total surface collection and archaeological monitoring of access construction is recommended. In the likely event that additional cultural materials including features are encountered, construction should stop immediately and the B.I.A. Area Archaeologist be notified. Construction in the area should not resume without permission of the B.I.A. Area Archaeologist.

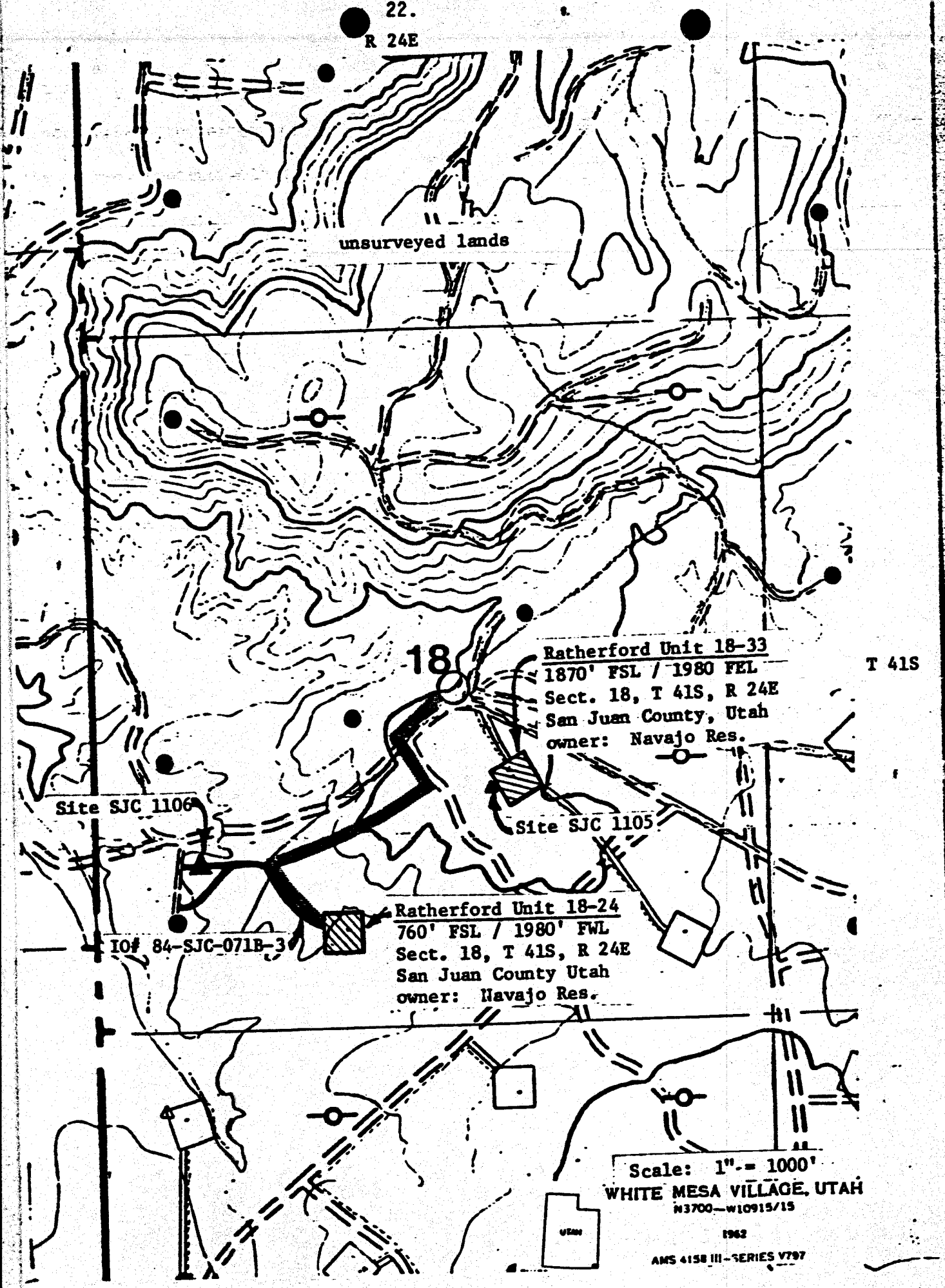

R 24E
unsurveyed lands
18
Ratherford Unit 18-33
1870' FSL / 1980 FEL
Sect. 18, T 41S, R 24E
San Juan County, Utah
owner: Navajo Res.
T 41S
Site SJC 1106
Site SJC 1105
Ratherford Unit 18-24
760' FSL / 1980' FWL
Sect. 18, T 41S, R 24E
San Juan County Utah
owner: Navajo Res.
IO# 84-SJC-071B-3
Scale: 1"= 1000'
WHITE MESA VILLAGE, UTAH
N3700—W10915/15
1962
AMS 4158 III-SERIES V797
UTAH
proposed well

Figure 5

DISCUSSION OF CULTURAL RESOURCES

A total of five isolates were located during the inspection. Isolates were located on only two project areas - the Ratherford Units 18-24 and 19-44. Two of the isolates (I.O.'s 6 and 7) are located in spatial proximity to sites (SJC-1107 and SJC-1108). I.O. 3 may be associated with a prehistoric component of SJC-1106 (see site description). Given that all six of the project areas contained archaeological sites, the number of isolates recorded seems low. It is noted, however, that while 1.6 isolates per 10 hectares (24.7 acres) were recorded during the nonsite-bearing portion of the survey (Langenfeld and Hooton, 1984), 2.6 isolates per 10 hectares (24.7 acres) were found in the project areas under discussion here. While the relative number of isolates per hectare increases, it does not do so substantially. The suggested reason for this is that artifacts that might have otherwise been recorded as isolates were incorporated into sites during this portion of the survey. In terms of absolute numbers of isolates recorded during the survey, it is suggested that the low numbers are probably the result of the nature of surface deposits in the project area. Isolates are more likely to be obscured in dunal deposits.

The isolates recorded during this portion of the survey are fully described in Table 1.

A total of eight archaeological sites was recorded during the survey. Site density can only validly be calculated by using total survey area size. A total of approximately 55 hectares (140 acres)

TABLE 1: Summary of Isolated Occurrences

I.O. #	Well Name	¼,¼,¼	Sec.	T	R	UTM Coordinates	Description	Comments
3	18-24	Center, N 1/2, SE,SW	18	41 S	24 E	Zone 12; 648,535 E 4,120,105 N	One complete secondary quartzite flake. Single-struck platform. Distal termination hinged. No retouch present. Cultural affiliation unknown.	Information potential exhausted with recording.
6	19-44	Center, SE,SE	19	41 S	24 E	Zone 12; 649,425 E 4,118,445 N	One black-on-white sherd. Heavily tempered with medium sized quartz with small amounts of angular igneous black rock. Heavily slipped and polished interior and exterior. Black paint present exterior. Vessel shape unknown. Design style similar to Mancos Black-on-white (Pueblo II-III, A.D. 900-1150).	Probably related to Site SJC-1107 or SJC-1108. Information potential exhausted with recording.
7	19-44	Center, SE,SE	19	41 S	24 E	Zone 12; 649,450 E 4,118,470 N	One broken tertiary flake of white chert. Platform preparation and distal termination unknown. Lateral edges show some nibbling either from use wear or as a result of exposure to elements. Cultural affiliation inferred as Pueblo II-III (A.D. 900-1150) based on proximity to Sites SJC-1107 & 1106.	Information potential exhausted with recording.

TABLE 1 (Continued)

I.O. #	Well Name	¼,¼,¼	Sec.	T	R	UTM Coordinates	Description	Comments
8	19-44	NW,NE,SE	19	41 S	24 E	Zone 12; 649,390 E 4,118,905 N	One broken gray quartzite flake. Platform prepared, distal termination unknown. No retouch present. Cultural affiliation unknown.	Information potential exhausted with recording.
9	19-44	SW,SE,NE	19	41 S	24 E	Zone 12; 649,290 E 4,119,150 N	One complete secondary quartzite flake. No platform preparation, distal termination hinged, no retouch present. Maximum length 44 m., maximum width 41 mm. Cultural affiliation unknown.	Located on road berm approximately 275 m. (900') north of I.O. #8. Information potential exhausted with recording.

were inspected during the survey. An average of 1.5 sites per 10 hectares (approximately 1 site per 20 acres) were located. This would suggest that given similar topography and terrain an average of over 30 sites per section can be anticipated.

All archaeological sites located during the inspection were found in dunal deposits. As indicated earlier, 75% of the sites are located in Zone C type dunes. The remaining 25% are located in active dunal deposits. Nineteen of the twenty total project areas contained either stable or active dunes, and over 40% of those project areas contained sites.

Prehistoric sites account for 88% (7) of all recorded sites and the one historic site (SJC-1105) may contain a prehistoric component in the form of an undated lithic scatter. Among the prehistoric sites and components, 63% are lithic scatters and 25% are artifact scatters, neither of which contains discernible surface features. Only 12% (1) of the sites shows clear evidence of having functioned as a habitation.

With the exception of SJC-1106, lithic scatters are undated. None contain clearly diagnostic chipped stone artifacts. One of the undated lithic scatters (SJC-1104) contains artifacts made of high-quality raw material which exhibit a quality of flaking and finishing frequently associated with Archaic sites. Based on a small surface sample and the known tendency for curation and reuse of Archaic chipped stone tools by later inhabitants, the suggestion that the site is Archaic in origin is tenuous at best. One Archaic site has been documented in Section 29 (see "Records Search" section). Anasazi Puebloan Period dates have been assigned to 50% (4) of the prehistoric sites and components on the

basis of ceramics. As indicated by the "Records Search" section of this report, Anasazi sites are not extremely well documented in the general vicinity of the project area. The majority of the Anasazi sites recorded during this survey appear to date between A.D. 700-1300; 75% of the Anasazi sites appear to have been classified as limited or specialized activity sites. This term is used to define all those sites that exhibit no surface indications of year-round dwellings. Limited activity sites may have been occupied once or reused periodically. Artifact types on most of the "limited activity" sites suggest that more than one activity was being carried out.

The one historic Navajo site appears to have functioned as a permanent sheep camp. Additional information concerning this site could probably be obtained by interviews with customary land users.

Table 2 presents a summary of archaeological sites by type.

In sum, the variety of sites recorded during the survey appears consistent with previously recorded sites in the vicinity, although the proportion of Puebloan sites appears somewhat higher. Moreover, the project area does not appear to have represented a highly desirable location for permanent habitation sites. This may be explained, in part, by the general paucity of natural resources (i.e. wood, permanent water, sheltered locations) within the area. All these resources are abundantly available closer to the San Juan River. The project area more likely represents a locus for a variety of specialized activity sites.

TABLE 2: Summary of Archaeological Sites

Site Number	Morphological Type	Functional Type	Cultural Affiliation
SJC-1104	Lithic scatter	Unknown	Unknown
SJC-1105	Lithic scatter; foundation, trash	Unknown; sheep camp	Unknown Navajo
SJC-1106	Lithic scatter	Unknown	Anasazi; BM II-P I
SJC-1107	Rubble mound, midden, artifact scatter	Habitation	Anasazi, P II
SJC-1108	Artifact scatter	Limited Activity	Anasazi, P II
SJC-1109	Lithic scatter	Unknown	Unknown
SJC-1110	Artifact scatter	Limited Activity	P II-P III
SJC-1111	Lithic scatter	Lithic Reduction	Unknown

SUMMARY OF RECOMMENDATIONS

Table 3 presents a summary of the recommendations chosen from those options outlined in the "Project Locations" section of the report. With the exception of Sites SJC-1109 and SJC-1111, all the prehistoric sites are suggested to have additional research potential and should be avoided. Although the research potential of Site SJC-1109 and SJC-1111 appears severely limited due to their deflated condition, each is acknowledged as a possible indicator of additional subsurface cultural deposits in the vicinity.

In the event that any or all of the recommendations in this report are accepted it is suggested that a compliance check be conducted following the initiation of construction activities to insure that stipulations are being followed.

In the event that any previously undiscovered archaeolcgical materials are encountered during the course of construction activities, work in the immediate area should cease immediately and the B.I.A. Area Archaeologist should be notified.

Final clearance is the prerogative of the B.I.A. Area Archaeologist and will be granted upon review of this report at his discretion.

TABLE 3: Summary of Recommendations

Site Number	Location	Recommendation
SJC-1104	17-33 Flow Line	Restrict vehicular activity to existing, bladed road southwest of proposed flow line.
SJC-1105	18-24 Access	Monitor of access construction at western end of originally proposed route. Collect surface artifacts.
SJC-1106	18-33 Well Location	Decrease east/west pad dimensions from 350' to 325'. Restrict mechanical disturbance to an area 175' west of center stake.
SJC-1107	19-11 Well Location	Restrict mechanical disturbance and vehicular traffic to area north and east of arroyo on pit side of pad.
SJC-1108	19-11 Flow Line	Outside project area. No recommendation required.
SJC-1109	19-44 Well Location	Monitor well pad construction.
SJC-1110	21-22 Well Location	Move center stake 125' south and rotate pad layout 90 degrees to the east.
SJC-1111	21-22 Access	No avoidance or mitigation is recommended.

BIBLIOGRAPHY

Fike, Richard E. and LaMar W. Lindsay
1976 Archaeological Survey of the Bluff Bench/San Juan River and White Mesa Areas, San Juan County, Utah, 1973-1974. In Antiquities Section Selected Papers Volume III, Numbers 9-11, Pgs. 1-23. Salt Lake City: Utah State Historical Society, Department of Development Services, Division of State History.

Hewett, Nancy S., Margaret A. Powers and Meade F. Kemrer
1979 An Archaeological Survey and Evaluation of Resources Along the San Juan River Near Aneth, Utah. Division of Conservation Archaeology, Contributions to Anthropology Series 46.

Langenfeld, Kristin
1982 Archaeological Surveys of 24 Proposed Drill Pad Conversions Near Montezuma Creek, San Juan County, Utah (CRMP-82-077). On file, Navajo Nation Cultural Resource Management Program, Window Rock, Arizona.

Langenfeld, Kristin and L. Jean Hooton
1984 Archaeological Surveys of 13 Proposed Well Locations and Associated Flow Lines and Access Routes in San Juan County, Utah, Conducted for Phillips Petroleum (84-SJC-071A). On file, Cultural Resources Management Program, San Juan College, Farmington, New Mexico.

Lipe, William
1970 Anasazi Communities of the Red Rock Plateau, Southeastern Utah. In Reconstructing Prehistoric Pueblo Societies, edited by William A. Longacre, Pgs. 84-139. Albuquerque: University of New Mexico Press.

Martin, Rena
1983 An Archaeological Survey of Surface Flowlines and Assorted Parcels of Land in San Juan County, Utah (CRMP-83-336). On file, Navajo Nation Cultural Resource Management Program, Farmington, New Mexico.

McEnany, Tim
1984 An Archaeological Survey of Two Well Locations Near Montezuma Creek, Utah for the Chuska Energy Company (CRMP-84-36). On file, Navajo Nation Cultural Resource Management Program, Farmington, New Mexico.

Reed, Alan C.
1983 An Archaeological Survey of A Segment of Seismic Line R-3-83 in San Juan County, Utah. Contributions to Anthropology Series No. 749. On file, Division of Conservation Archaeology, Farmington, New Mexico.

LA# _____

Field No. 18-24 Access

LABORATORY OF ANTHROPOLOGY, MUSEUM OF NEW MEXICO
ARCHEOLOGICAL SITE SURVEY FORM

LA No._____ Site Name_____ Other Inst.# SJC-1105

MNM Proj.#_____ UTM: Zone 12 E 648905 N 4120430

Legal Desc. T 41 N/S R 24 E/W Sec. 18

SW 1/4 of the NW 1/4 of the SE 1/4

Unplatted____ Grant____ Owner & Address Navajo Nation

*Map Reference: White Mesa Village, Utah Date: 1962 Scale: 1:62500

County San Juan State Utah Nearest Named Drainage Sahgzie Creek

Locational Desc.: Recognized Landmarks Flat Top Mountain

Site Type: foundation, trash areas, lithic scatter

Site Size: Length 60 m. n/s Width 40 m. e/w Elevation (# of Feet) 4,800

Topographic Setting (Location & Access): site is located west of an existing two-track.

____arroyo/wash
____base of cliff
____bench
____blowout
____canyon rim
____cave
____cliff/scarp
____constricted cyn
____dune

flood plain/
____valley bottom
____hill top
____hill slope
__X__low rise
____mesa
____mountain
____mt. front/foothill
____open canyon floor

____plain/flat
____playa
____ridge
____saddle
____base talus slope
____terrace
other (specify)_____
_____
_____

Local Vegetation rabbitbrush, prickly pear cactus, ricegrass, yucca, snakeweed.

Ecological Zone: forest____ woodland____ scrubland____ grassland____
desertscrub__X__ marshland____ other (specify) _____

*Form must be accompanied by photocopy portion of USGS map showing T., R., scale and quad name.

LA# _____

Field No. _____

Other Inst.# SJC-1105

Soil Type: rocky___ gravelly___ sandy X clayey___ other _____

Local Outcrops: sandstone X shale___ limestone___ basalt___ tuff___ other (specify) _____

Nature & estimated depth of cultural deposits: probably less than .5 m.

Arch. Status: Amount and Type of Work Past and Present no known past work. Present work limited to site recording, mapping.

BLM Category I Rec'd N/A

BLM Category II Rec'd N/A

National and/or State Register Status:

___On State Register
___On National and State Register
___Recommended for National by State, on State Register
___Recommended for National and State Register
___In District, National and State
___In District, National
___In District, State
___Recommended and rejected
___Insufficiently evaluated, potential unknown
___Not nominated, potentially significant(archaeologist's rec'd)
X Not nominated, does not appear to be significant(arch. rec'd)

Condition of Site: intact___ grazed X eroded X mech. disturbance___ vandalized___ other _____

Mitigation: avoid X monitor___ test___ excavate___ not required ___

Surveyed for Phillips Petroleum

Record Form: Surv. Forms X Excav. Forms___ Sketch Map X Photos X

Loc. of Forms, Maps, Photos San Juan College, Cultural Resources Management Program

Surface and/or Subsurface Collections: yes___ no X Strategy _____

Location of Collected Artifacts N/A

Previous Collections? ? When_____ Repository_____

Is there another site close by? No LA or Field Identif.# _____

Artifact Density: ~~10's~~, 10's, ~~XXXXXXXXXXXXXXX~~ average 1/m^2 per unit.

Time/Diagnostic Artifacts: tin cans, historic trash

LA# _____

Field No. _____

Other Inst. # SJC-1105

No. of Temporal Components ?2

(Earliest to Latest)

****

Temporal Component (1)

Features lithic scatter

Culture Unknown Period Unknown Phase Unknown

Site Function: Unknown Best Date Unknown

Method of Date: N/A

****

Temporal Component (2)

Features foundation, three trash areas

Culture Navajo Period Historic Phase Recent

Site Function ? sheep camp Best Date A.D. 1945-Present

Method of Date tin cans, plastic, glass

****

Temporal Component (3)

Features _____

Culture _____ Period _____

Phase _____

Site Function _____ Best Date _____

Method of Date _____

****

Additional Temporal Components

Field No.

Other Inst. # SJC-1105

Published Reference:

Date June, 1984

Institution San Juan College, Cultural Resources Management Program, Farmington, NM

Author and Title Kristin Langenfeld, Archaeological Surveys of Six Proposed Well Locations and Associated Flow Lines and Access Routes in San Juan County, Utah, Conducted for Phillips Petroleum Company (#84-SJC-071B)

Remarks: The site consists of the remains of a Navajo sheep camp with a possible prehistoric component. Evidence of the prehistoric component is limited to a highly dispersed chipped stone scatter, the boundaries of which coincide approximately with those of the historic Navajo site. Less than 15 pieces of chipped stone were located during the inspection of an area approximately 150 m. x 150 m. No concentrations of artifacts were found. Isolated chipped stone flakes and a total of two cores were located in the vicinity of the Navajo component foundation and to the north and west. These artifacts may represent the remains of a surface scatter that has been dispersed by erosion and grazing activities. It is also possible that they are related to an unlocated site outside the project area. The most likely place for such a hypothetical site would be in the semistabilized dune areas approximately 150 m. to the northwest of the project area. No diagnostic chipped stone is present on or adjacent to the Navajo site or proposed well location and, therefore, the cultural affiliation of the lithics is indeterminate. Moreover, the limited number and highly dispersed locations of chipped stone do not suggest the presence of subsurface cultural materials within or adjacent to the project area or Navajo component. The Navajo component of SJC-1105 consists of the remains of a sandstone foundation, two ash and trash areas, a rock concentration of unknown function and scattered historic trash. Only the central feature, containing a portion of the site, is shown on the accompanying site map. The most prominent feature consists of the remains of a relatively large, unshaped sandstone foundation apparently measuring approximately 15 m. in diameter. A portion of one upright juniper post is located at the northern side of the alignment. The shape and size of the alignment suggests the base of a permanent structure as opposed to either a tent base or lambing pen or corral. No materials used in the construction of the super-structure are present on the site. It appears likely that these materials, as well as part of the foundation, have been removed for reuse. Two relatively large (approximately 4 m. in diameter) ash and trash areas are located to the south and west of the foundation. These areas contain tin cans, ash, charcoal, metal pieces, clear and brown glass fragments and several shoes. In addition, a small (approximately 1.5 m. in diameter) concentration of unshaped sandstone is located approximately 6 m. west of the west side of the foundation. No alignments are present and the function of this concentration is unknown. An additional extensive trash scatter is located approximately 150 m. northwest of the foundation area on the top of a low sandstone outcrop. This concentration contains lard buckets, evaporated milk cans, clear glass fragments, potted meat tins, black plastic, small pieces of milled lumber and pieces of a large glass water container. The majority of identifiable trash is located in this area, although the trash is scattered from this concentration downslope to the southwest and south. Although located some distance from the foundation area, it is suggested that at least some of the trash in this scatter is related to the major portion of

Field Recorder Kristin Langenfeld Date 5/23/84

Lab Recorder Kristin Langenfeld Date 5/29/84

Remarks (Continued) SJC-1105:

the site. No additional features were located in this area. The site appears to have functioned as a sheep camp and the presence of a foundation suggests a permanent camp which could be used either year-round or seasonally. A camp is indicated by the predominance of tin containers compared to glass and the general absence of habitation related items such as kitchen utensils, dishes, etc. Types of trash present on the site suggest a post A.D. 1930 date for the site. A few aluminum soda cans and the black plastic suggest either relatively recent reuse of the area or perhaps an isolated instance of trash dumping.

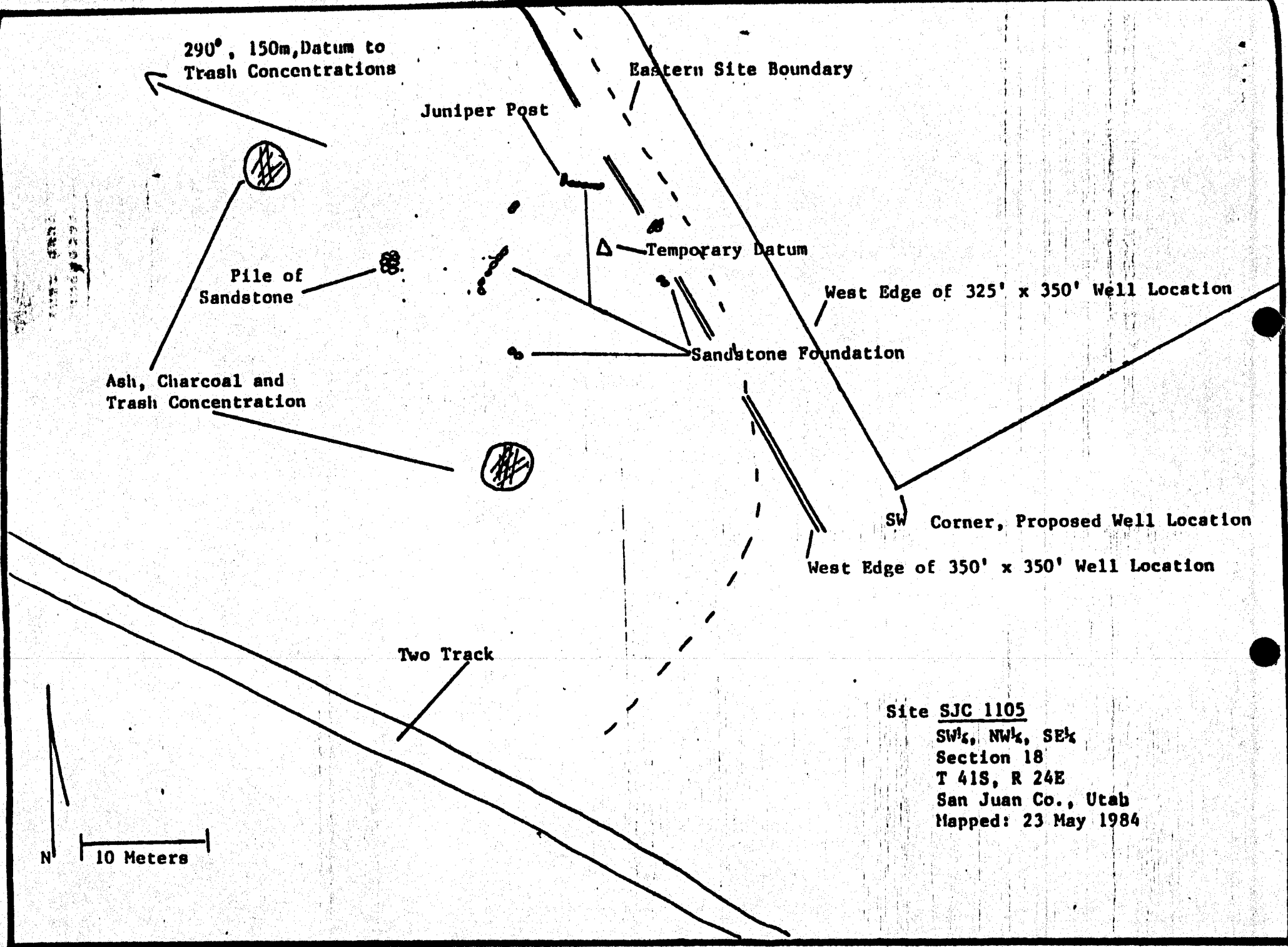

290°, 150m, Datum to Trash Concentrations
Eastern Site Boundary
Juniper Post
Temporary Datum
Pile of Sandstone
West Edge of 325' x 350' Well Location
Sandstone Foundation
Ash, Charcoal and Trash Concentration
SW Corner, Proposed Well Location
West Edge of 350' x 350' Well Location
Two Track
N
10 Meters
Site SJC 1105
SW¼, NW¼, SE¼
Section 18
T 41S, R 24E
San Juan Co., Utah
Mapped: 23 May 1984

Figure 9

December 2, 1965

Ratherford Unit, San Juan County, Utah -
Application No. 32773 - Request for Extension
of Time to Make Proof of Appropriation

Mr. R. M. Williams (2)
Legal Department

Phillips' Application No. 32773 to the State of Utah for appropriation of water to be used in the Ratherford Unit project was approved on September 5, 1961. One condition of the approval was that a proof of appropriation be submitted by February 28, 1963. Subsequently an extension was granted and the proof of appropriation is now due on February 28, 1966. It is not possible to determine at this time the quantity of water that will ultimately be required and this is to request your assistance in obtaining an additional extension of time before it is necessary to file the proof.

Attached is a copy of Mr. C. M. Boles' letter dated November 23, 1965, which transmits a copy of an unexecuted application for an extension of time for filing the proof from February 28, 1966, to February 28, 1971. Please examine the application as to form and, if it is acceptable, forward it to Mr. J. E. Chrisman, who will arrange for its execution. If it is your opinion that the legal firm of Senior and Senior should file the application, as was done previously, please so advise and the executed application will be returned to you.

Slofner Smith

JEC:gm
Attach.

cc: Messrs. C. W. Corbett
Attn. T. L. Osborne
C. M. Boles

12/8/65

FORM 32 SM 5-57

Copied for
C. M. Bole
4-18-62 EFL:m

THE STATE OF UTAH
OFFICE OF THE STATE ENGINEER
SALT LAKE CITY

March 26, 1962

Phillips Petroleum Company
Bartlesville,
Oklahoma

Gentlemen: RE: APPROVED APPLICATION NO. a-4025

Enclosed find Application No. a-4025 which has been approved by me. This approved Application is your authority to proceed with actual construction work which, under Sections 73-3-10 and 73-3-12, Utah Code Annotated 1953, as amended, must be diligently prosecuted to completion. The water shall be put to beneficial use and proof of appropriation filed with the State Engineer, as provided in the original application as amended by this approved change Application.

Failure on your part to comply with the requirements of the statutes may result in forfeiture of your Application.

Yours truly,
Wayne D. Criddle
Wayne D. Criddle
STATE ENGINEER
403 STATE CAPITOL
SALT LAKE CITY, UTAH

ADDRESS ALL COMMUNICATIONS TO:

js
Encl: Copy of approved application

CHANGE APPLICATION APPROVED

(Form for pending original Application)

Copied for
C. M. Boles
11-3-61 SS:mll

THE STATE OF UTAH

OFFICE OF STATE ENGINEER

WAYNE D. CRIDDLE
STATE ENGINEER

SALT LAKE CITY
October 30, 1961

Issue Date: October 30, 1
Expiration Date: April 30

Phillips Petroleum Company
c/o Senior and Senior, Attorneys
#10 Exchange Place
Salt Lake City 11, Utah

Gentlemen:

RE: APPROVED APPLICATION NO. 32773 AND
CHANGE APPLICATION NO. a-4025

This is to acknowledge receipt of your Permanent Change Application No. a-4025 which proposes to change the point of diversion of 8.0 sec.-ft. of water initiated by Application No. 32773. The was to have been diverted from ten 12.75-inch O.D. wells located within S½N½NE¼ and SE¼NE¼ of Sec. 5, T41S, R24E, SLB&M. It is now proposed to divert the 8.0 sec.-ft. of water from a total of 41 wells 12.75 inches O.D, between 35 and 50 ft. deep, ten of these being the same as heretofore described and thirty-one wells to be located within NW¼ Sec. 3, N½ Sec. 4, NW¼ Sec. 5, T41S, R24E, SLB&M. The water is to be used for pressure maintenance and secondary recovery purposes as heretofore.

You have requested permission to proceed immediately with the drilling of these additional 31 wells. This letter grants you that privilege with the understanding that all risks as regards water rights are being assumed by you.

If other than new standard casing is to be used in these wells such casing must be inspected and approved by a representative from this office. All wells must be so constructed and finished that they may be readily controlled at all times, in order to prevent waste of underground water. Wells must be drilled and cased in such a manner that will prevent the infiltration of contaminated water into them.

The driller must be bonded and have a current permit from the State Engineer. Before commencing, he must give this office notice as to the day he will begin drilling. Also, within 30 days after the well has been completed or abandoned, he must file a well driller's report for each well. These reports are to contain accurate and complete information regarding the work done and become part of the files in this office pertaining to the above-numbered filings.

This is permission for a licensed driller to begin drilling your wells.

Please note that the expiration date of this letter is April 30, 1962.

Yours truly,

Wayne D. Criddle
Wayne D. Criddle
STATE ENGINEER

ds

RECEIVED
1961
SENIOR

Lewis Hoover File/SS

October 13, 1961

AIRMAIL

Mr. Clair M. Senior
Senior & Senior
Attorneys at Law
10 Exchange Place
Salt Lake City, Utah

Re: Alternate or Additional Source of Water
for the Ratherford Unit, San Juan County, Utah

Dear Clair:

Herewith in triplicate is completed and signed application to the Utah State Engineer for additional and alternate points of diversion for water for waterflood purposes in the Ratherford Unit. I would appreciate it if you would handle this matter with the Water Engineer and, as diplomatically as possible, urge upon him the importance of expediting the matter as much as possible.

Having gotten these papers back from the Production Department too late to get a check for the filing fee, I would ask that you advance the fee and, upon being billed, I will send you the check.

If you need any additional information, please advise.

Very truly yours,

R. M. Williams

RMW:jd
Enclosures

cc - Mr. Shofner Smith

3 copies Thompson Claim Service 10-13-67 Pick-up

Form 107—6-57—2M

CHANGE APPLICATION NO. .....

Application for Permanent Change of Point of Diversion, Place and Nature of Use of Water

STATE OF UTAH

Do not fill out this blank until you have read carefully and thoroughly understand the "Rules and Regulations" on the back hereof and all the notes in the body of it.

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

water right acquired by original Application No. 32773
(Give No. of Application, certificate of appropriation, title and date of Decree or other identification of right)

to that hereinafter described, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of the Laws of Utah.

1. *The name of the applicant is* Phillips Petroleum Company
2. *The post-office address of the applicant is* Bartlesville, Oklahoma
3. †*The flow of water which ~~has been or~~ was to have been used in second-feet is* 8
4. †*The quantity of water which has been or was to have been used in acre-feet is* XX
5. †*The water ~~has been or~~ was to have been used each year from* January 1 (Month) (Day) *to* December 31 (Month) (Day) *incl.*
6. †*The water has been or was to have been stored each year from* XX (Month) (Day) *to* XX (Month) (Day) *incl.*
7. *The drainage area to which source of supply belongs is* ..... (Leave blank)
8. *The direct source of supply is* Underground water and subsurface flow of San Juan River *in* San Juan *County.*
9. †*The point/s of diversion as described in the original Application ~~or the point at which the water has been diverted~~ if* are *situated at a point* s in Section 5, T. 41S., R. 24E as more particularly set out in the original Application No. 32773.

10. †*The water involved ~~has been or~~ was to have been used for the following purposes:*
Pressure maintenance and secondary recovery purposes

Total XX Acres.

NOTE—If for irrigation, give legal subdivision of land and total acreage which has been or was to have been irrigated. If for other purposes, give nature, place and extent of use or proposed use.

11. †*The point at which water has been or was to have been returned to the stream channel is situated as follows:* XX

NOTE—The above space is to be filled in only when all or part of the water is returned to the natural stream or channel.

The Following Changes Are Proposed

12. *The flow of water to be changed in cubic feet per second is* No change
13. *The quantity of water to be changed in acre-feet is* XX
14. *The water will be used each year from* January (Month) 1 (Day) *to* December (Month) 31 (Day) *incl.*
15. *The water will be stored each year from* XX (Month) (Day) *to* XX (Month) (Day) *incl.*
16. *The point at which it is now proposed to divert the water is situated (See note)* See explanatory

NOTE—The "point of diversion," or "point of return," must be located by course and distance or by rectangular distances with reference to some regularly established United States land corner or United States mineral monument if within a distance of six miles of either, or if a greater distance, to some prominent and permanent natural object.

17. *The proposed diverting and conveying works will consist of* wells and conveyance pipe as explained in original Application No. 32773
18. *The cross-section of the diverting channel will be.* XXXXXXXX O (Strike out ones not needed)
19. *The nature of the diverting channel will be: ~~earth, wood~~, iron, ~~concrete~~.* (Strike out the ones not needed)

†Strike out written matter not needed.

THE STATE OF UTAH
OFFICE OF STATE ENGINEER
SALT LAKE CITY

September 11, 1961

RECEIVED
WAYNE D. CRIDDLE
State Engineer
PRODUCTION
DEPARTMENT

Phillips Petroleum Company
Bartlesville,
Oklahoma

Gentlemen: RE: APPROVED APPLICATION NO. 32773

Enclosed find Approved Application No. 32773 . This is your authority to proceed with actual construction work which, under Sections 73-3-10 and 73-3-12, Utah Code Annotated, 1953, as amended, must be diligently prosecuted to completion. The water shall be put to beneficial use and proof of appropriation made to the State Engineer on or before ----------February 28, 1961------otherwise the application will lapse.

Failure on your part to comply with the requirements of the statutes may result in forfeiture of this application.

Note error in date
Eff 9/15/61

Yours truly,

Wayne D. Criddle

ADDRESS ALL COMMUNICATIONS TO:
Wayne D. Criddle
STATE ENGINEER
STATE CAPITOL BUILDING
SALT LAKE CITY, UTAH

js
Encl: Copyof approved application

APPLICATION APPROVED

NOTICE TO APPLICANT

The approval of this Application is not a certificate of change. It is merely your authority to begin construction work, which must be diligently prosecuted to completion. To secure a certificate of change under this Application proof of change must be submitted within the time limit allowed by the State Engineer. The amount of water for which certificate will be issued will depend upon the amount of water actually put to a beneficial use, not to exceed, however, the amount of water covered by the original right. For further information write the State Engineer.

RULES AND REGULATIONS

Applicants will save time and expense by familiarizing themselves with the law before making Applications.

If the reservoir is to be located on the channel of the source from which the water is to be appropriated, it should be so stated under explanatory, and—

1. The location of the impounding dam should be described in Paragraph 16.
2. The point where the released storage will be rediverted from the natural stream should be described under explanatory in accordance with the note under Paragraph 16.

When the water is to be stored in other than the natural channel of the source from which it is to be appropriated, it should be so stated under explanatory, and—

1. The point of diversion from the supplying source should be described in Paragraph 16.
2. The intersection of the longitudinal axis of impounding dam and centerline of stream channel or drainage and a similar point where the released storage will be rediverted from a natural channel should be described under explanatory in accordance with the note under Paragraph 16.

In all cases Paragraphs 17 to 27, incl., should describe the proposed diverting and carrying works, exclusive of natural channels, even if already constructed in whole or in part.

If it is proposed to collect the water of a number of springs or other sources at a common point, said point should be described as the point of collection in Paragraph 16, and the point of diversion from each source should also be described under explanatory in accordance with the note in Paragraph 16. The quantity of water sought from each source should be indicated under explanatory, the total equaling the quantity specified in Paragraphs 12 or 13. Where the source of supply is in reality a spring area, the point of diversion is the point where the water is collected; in such case the exterior boundary of the spring area must be described under explanatory by metes and bounds and located with reference to the same point as used in describing the point of collection and as outlined by the note under Paragraph 16.

No enlargement of an original water right may be made by a change Application, either as to quantity of water covered, period of use or otherwise.

When there are two or more coapplicants the Application must be accompanied by a power of attorney.

The applicant's permanent address should be given in Paragraph 2, and the State Engineer notified promptly of any change in address; otherwise applicant may lose rights initiated by Application by failing to receive notices sent from the State Engineer's office.

No Application or other paper pertaining to an Application will be marked received unless accompanied with the required filing fee.

Applications accepted and numbered by the State Engineer, when returned to applicant for correction or additions, must be amended with red ink. Erasures must not be made, but any matter may be eliminated by running a red line through it. Corrected Applications must be resubmitted to the State Engineer's office, within sixty days from the date of State Engineer's letter returning Application for correction; otherwise the priority of the right to change will be brought down to date corrected Application is resubmitted.

Applicants will be informed by the State Engineer's office when cost of publishing notice of Application is due, and must advance cost within sixty days after date of notice, otherwise Application will lapse.

Fees Required by Law Payable to State Engineer

For examining and filing Applications for change of point of diversion, place and nature of use.....$2.50

For approving and recording Applications for change of point of diversion, place and nature of use.....$2.50

For filing written proof of change.....$1.00

For examining maps, profiles and drawings that are part of the proof of change.....$5.00

For issuing certificate of change.....$1.00

NOTE—In addition to the above fees applicants must pay the cost of publication of "Notice to Water Users" concerning the proposed change.

20. The length of the diverting channel, exclusive of laterals, will be 15,000 feet
(If an existing channel is used give only the length of that part used under this Application)

21. The top width of the diverting channel will be (if a ditch) XX feet

22. The bottom width of the diverting channel will be (if a ditch) XX feet

23. The depth of water in the diverting channel will be (if a ditch) XX feet

24. The width of diverting channel will be (if a flume) XX feet

25. The depth of water in the diverting channel will be (if a flume) XX feet

26. The diameter of the diverting channel will be (if a pipe) 42.75 inches C.D. inches

27. The grade of the diverting channel will be 21.4 feet per thousand

28. The point at which it is proposed to return the water is situated (See note under 16)
XX

29. The water is to be used for the same purposes as specified in the original Application No. 32773

Total XX acres.

NOTE—If for irrigation, give legal subdivisions of land to be irrigated. If for other purposes, give place and extent of proposed use. If for power give number, size and make of wheels, head under which they will operate, total H. P. to be developed and place where power will be used.

30. The character of the soil to be irrigated is XX; subsoil XX

NOTE—Number 30 is to be filled in only when proposed change is for irrigation.

31. If paragraph 12 designates that only part of the right described in paragraph 1 to 11 inclusive is to be changed, designate the status of the water so affected by this change as to its being abandoned or used as heretofore.

EXPLANATORY

NOTE—Paragraph 13 on page 1 must not be used except when storage is contemplated; in such case Paragraph 14 should indicate the time in each year during which the water will be released and used. The lands to be inundated by the reservoir must be described in the space below this note as nearly as may be and by government subdivisions if upon surveyed land, and the area of the reservoir when at full stage should be given in acres; the height of the impounding dam must also be specified.

The following additional facts are set forth in order to define more clearly the full purpose of the proposed change:

The original Application No. 32773 specified _____ points of diversion situate in Section 5, T. 41S., R. 24E., San Juan County, Utah, and bears the following notation: "Diversion will be from one or more or all of the above diversion points. Water from the several diversion points will be commingled in conveyance works or in use. The applicant proposes to divert water from the San Juan River partly or wholly by means of infiltration wells, pits or horizontal galleries, dug in the alluvial fill within the stream valley. The exact number, depth, diameter, spacing and yield of such wells, pits or galleries will be determined during the project construction; however, the aggregate withdrawal rate will not exceed that specified." The purpose of this Change Application is to secure approval of additional alternative points of diversion as hereinafter specified without waiver of any rights under the original Application and without increase in the quantity of water applied for or the ultimate objective and purpose of the original Application.

See "Explanatory" continued on attached sheet.

PHILLIPS PETROLEUM COMPANY

Signature of Applicant.

BY _____
Vice-President of Production

EXPLANATORY - contd. from printed form.

The additional alternative points of diversion from the source are in Section 3, T. 41S., R. 24E., San Juan County, Utah, situate at points as follows:

Diversion Point	From West Line	From North Line	Subdivision
1	100'	1780'	SW¼NW¼
2	365'	1780'	"
3	630'	1770'	"
4	900'	1620'	"
5	1170'	1620'	"
6	1400'	1600'	SE¼NW¼
7	1530'	1600'	"
8	1900'	1600'	"
9	2150'	1620'	"
10	2400'	1700'	"
11	2640'	1750'	"
12	2900'	1810'	SW¼NE¼
13	3180'	1900'	"
14	3400'	1950'	"
15	3650'	2050'	"
16	3870'	2225'	"
17	4100'	2450'	SE¼NE¼
18	4250'	2700'	NE¼SE¼
19	4380'	2975'	"
20	4420'	3250'	"

EXPLANATORY - contd. from printed form.

The additional alternative points of diversion from the source are in Section 3, T. 41S., R. 24E., San Juan County, Utah, situate at points as follows:

Diversion Point	From West Line	From North Line	Subdivision
1	100'	1780'	SW¼NW¼
2	365'	1780'	"
3	630'	1770'	"
4	900'	1620'	"
5	1170'	1620'	"
6	1400'	1600'	SE¼NW¼
7	1530'	1600'	"
8	1900'	1600'	"
9	2150'	1620'	"
10	2400'	1700'	"
11	2640'	1750'	"
12	2900'	1810'	SW¼NE¼
13	3180'	1900'	"
14	3400'	1950'	"
15	3650'	2050'	"
16	3870'	2225'	"
17	4100'	2450'	SE¼NE¼
18	4250'	2700'	NE¼SE¼
19	4380'	2975'	"
20	4420'	3250'	"

OPERATOR Phillips Oil Co. DATE 10-5-84

WELL NAME Rathmford Unit #18-24

SEC SE SW 18 T 41S R 24E COUNTY San Juan

43-037-31079
API NUMBER

Indian
TYPE OF LEASE

POSTING CHECK OFF:

☐ INDEX	☐ HL	☐
☐ NID	☐ PI	☐
☐ MAP	☐	☐

PROCESSING COMMENTS:
Unit well - ℄ on POD (BLM - New Mexico - Steve Mason)
Water ℄ -

APPROVAL LETTER:

SPACING: ☑ A-3 Rathmford UNIT ☐ c-3-a CAUSE NO. & DATE

☐ c-3-b ☐ c-3-c

SPECIAL LANGUAGE:

- [x] RECONCILE WELL NAME AND LOCATION ON APD AGAINST SAME DATA ON PLAT MAP.
- [x] AUTHENTICATE LEASE AND OPERATOR INFORMATION
- [x] VERIFY ADEQUATE AND PROPER BONDING
- [x] AUTHENTICATE IF SITE IS IN A NAMED FIELD, ETC.
- [ ] APPLY SPACING CONSIDERATION
  - [ ] ORDER _____
  - [x] UNIT _____
  - [ ] c-3-b
  - [ ] c-3-c
- [x] CHECK DISTANCE TO NEAREST WELL.
- [ ] CHECK OUTSTANDING OR OVERDUE REPORTS FOR OPERATOR'S OTHER WELLS.
- [x] IF POTASH DESIGNATED AREA, SPECIAL LANGUAGE ON APPROVAL LETTER
- [x] IF IN OIL SHALE DESIGNATED AREA, SPECIAL APPROVAL LANGUAGE.

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dianne R. Nielson, Ph.D., Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

October 10, 1984

Phillips Oil Company
P. O. Box 2920
Casper, Wyoming 82602

Gentlemen:

Re: Well No.Ratherford Unit #18-24 - SE SW Sec. 18, T. 41S, R. 24E
760' FSL, 1980' FWL - San Juan County, Utah

Approval to drill the above referenced oil well is hereby granted in accordance with Section 40-6-18, Utah Code Annotated, as amended 1983; and predicated on Rule A-3, General Rules and Regulations and Rules of Practice and Procedure.

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

1. Spudding notification to the Division within 24 hours after drilling operations commence.

2. Submittal to the Division of completed Form OGC-8-X, Report of Water Encountered During Drilling.

3. Prompt notification to the Division should you determine that it is necessary to plug and abandon this well. Notify John R. Baza, Petroleum Engineer, (Office) (801) 533-5771, (Home) 298-7695 or R. J. Firth, Associate Director, (Home) 571-6068.

4. Compliance with the requirements and regulations of Rule C-27, Associated Gas Flaring, General Rules and Regulations, Oil and Gas Conservation.

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

The API number assigned to this well is 43-037-31079.

Sincerely,

R. J. Firth
Associate Director, Oil & Gas

as
Enclosures
cc: Branch of Fluid Minerals
Bureau of Indian Affairs

(Formerly 9-331) **DEPARTMENT OF THE INTERIOR** (other instructions on reverse side)

BUREAU OF LAND MANAGEMENT

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.	14-20-603-353
6. IF INDIAN, ALLOTTEE OR TRIBE NAME	Navajo
1. OIL WELL ☐ GAS WELL ☐ OTHER	Satellite Gathering Station 18
7. UNIT AGREEMENT NAME	SW-I-4192
2. NAME OF OPERATOR	Phillips Oil Company
8. FARM OR LEASE NAME	Ratherford Unit
3. ADDRESS OF OPERATOR	P. O. Box 2920, Casper, WY 82602
9. WELL NO.	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface	Center of Section 18, T41S, R24E, SLPM, San Juan County, Utah
10. FIELD AND POOL, OR WILDCAT	Greater Aneth
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA	Sec. 18-T41S-R24E
14. PERMIT NO.	
15. ELEVATIONS (Show whether DF, RT, GR, etc.)	4750' MSL
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	☐	PULL 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)			X	(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.)*

Phillips Oil Company proposes to expand surface facilities to a plot 80' x 200', 0.37 acres, in the center of Section 18-T41S-R24E, immediately adjacent to and inclusive of the existing 30' x 30' Section 18 header installation. This area is to be used to install oil well production test facilities. The area will be fenced, bermed, and reseeded upon abandonment.

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

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

SIGNED A. E. Stuart TITLE Area Manager DATE January 30, 1985

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

Federal approval of this action is required before commencing operations.

ACCEPTED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
DATE 2/7/85
BY

*See Instructions on Reverse Side

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

Form 3160-4
(November 1983)
(formerly 9-330)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE* (Other instructions on reverse side)

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

RECEIVED
MAR 25 1985
DIVISION OF OIL GAS & MINING

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

5. LEASE DESIGNATION AND SERIAL NO.: 14-20-603-353
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.: 18-24
10. FIELD AND POOL, OR WILDCAT: Greater Aneth
11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec. 18-T41S-R24E

2. NAME OF OPERATOR: Phillips Oil Company
3. ADDRESS OF OPERATOR: P. O. Box 2920, Casper, Wyoming 82602
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
At surface: 760' FSL & 1980' FWL, SE SW
At top prod. interval reported below
At total depth

API #43-037-31079

14. PERMIT NO.: 43-037-31079 | DATE ISSUED: 10-10-84
12. COUNTY OR PARISH: San Juan | 13. STATE: Utah

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (Ready to prod.)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
12/26/84	1/6/85	3/9/85	GR 4724', RKB 4737.5'	--

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
5561'	5540'	--	→	0 - 5561'	--

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 5488' - 5527' Desert Creek Zone I

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: Dual Guard FoRxo/Cal, CDL/DSN, Contact Caliper

27. WAS WELL CORED: No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	54.5#	115'	17-1/2"	177 cu.ft. Class "B"	--
9-5/8"	36#	1610'	12-1/4"	1322 cu.ft. Class "B"	--
7"	23# & 26#	5561'	8-3/4"	1504 cu.ft. Class "B"	--

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
--	--	--	--	--

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-7/8"	5337'	

31. PERFORATION RECORD (Interval, size and number)
5488-5501, 2 SPF, 4" HSC Tbg Conv Gun, 26 holes
5506-5510, 2 SPF, 4" HSC Tbg Conv Gun, 8 holes
5514-5517, 2 SPF, 4" HSC Tbg Conv Gun, 6 holes
5524-5527, 2 SPF, 4" HSC Tbg Conv Gun, 6 holes

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5488-5527'	Spot 1350 gal 28% FE Acid w/2½ gal/1000 HC-2, 4 gal/1000 Lo-Surf 259 & 2 gal/1000 HAI-60. Breakdown w/5 gal/ft of acid. Pump 200 gal acid, then drop 70, 1.1 sp gr, ball sealers

(CONTINUED ON BACK)

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)
3/9/85	Pumping 1-3/4"	Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
3/21/85	24	--	→	181	72	29	400

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
--	--	→	181	72	29	40.0

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

35. LIST OF ATTACHMENTS: None

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

SIGNED A. E. Stuart TITLE Area Manager DATE March 22, 1985

(DIST ON BACK)

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

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

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

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
32. CONTINUED			
evenly spaced thru remainder of 2450 gal acid. Displaced w/lease water.			
Cased Hole DST run in conjunction with tbg conveyed gun. IFP 10 min, slight vac. 1st SIP 120 min, 2nd FP 120 min (bubble in bucket after 45 min, 2-1/4" bubble after 50 min, reduced to 1/4" bubble after 120 min). FSIP 120 min. DST Results: ISIP 1223, FHP 2456, IHP 2465. Recovered 10' oil, 50' water over cushion. Sampler: 1090 CCL water, pressure 210 psig.			

Distribution:
4 - BLM, Farmington, NM
2 - Utah O&G CC, Salt Lake City, UT
1 - The Navajo Nation, Window Rock, AZ
1 - B. A. Conner, B'Ville
1 - L. R. Williamson, Denver
1 - R. M. Coffelt (r) Pat Bertuzzi, Denver
1 - D. L. Fraser, Denver
1 - O. G. Poling, Denver
1 - W.I. Owners
1 - P. J. Adamson
1 - File RC

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
LOG TOPS		
Shinarump	2242'	
DeChelly	2582'	
Hermosa	4488'	
Desert Creek	5479'	

Mobil Oil Corporation

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

May 14, 1986

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

Attn: R. J. Firth
Associate Director

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

FORM 10

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

MONTHLY OIL AND GAS PRODUCTION REPORT

OPERATOR NAME AND ADDRESS:

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

OPERATOR ACCOUNT NUMBER: N0772

REPORT PERIOD (MONTH/YEAR): 6 / 93

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

USGS 8-16-93

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

I hereby certify that this report is true and complete to the best of my knowledge. Date: 8/11/93

Name and Signature: PAT KONKEL Pat Konkel Telephone Number: 505 599-3452

(6/93)

FORM 9

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

5. LEASE DESIGNATION & SERIAL NO.

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.)

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
NAVAJO TRIBAL

1. OIL WELL ☐ GAS WELL ☐ OTHER

7. UNIT AGREEMENT NAME
RATHERFORD UNIT

2. NAME OF OPERATOR
MOBIL OIL CORPORATION

8. FARM OR LEASE NAME

3. ADDRESS OF OPERATOR
P. O. BOX 633 MIDLAND, TX 79702

9. WELL NO.

RECEIVED
SEP 13 1993

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

DIVISION OF
OIL, GAS & MINING

10. FIELD AND POOL, OR WILDCAT
GREATER ANETH

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

14. API NO.	15. ELEVATIONS (Show whether DF, RT, GR, etc.)	12. COUNTY	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	☐	PULL 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) CHANGE OF OPERATOR			
(Other)				(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			
APPROX. DATE WORK WILL START _____				DATE OF COMPLETION _____			

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

* Must be accompanied by a cement verification report.

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

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

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

(This space for Federal or State office use)

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

See Instructions On Reverse Side

(3/89)

FORM 11

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

MONTHLY OIL AND GAS DISPOSITION REPORT

OPERATOR NAME AND ADDRESS:

L.B. Sheffield
~~BRIAN BERRY~~
~~M E P N A~~ MOBIL
~~POB 219031 1807A RENTWR~~ P.O. DRAWER G
DALLAS TX 75221-9031 CORTEZ, Co. 81321

UTAH ACCOUNT NUMBER: N7370

REPORT PERIOD (MONTH/YEAR): 7 / 93

AMENDED REPORT ☐ **(Highlight Changes)**

*931001e updated. fe

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

RECEIVED
SEP 13 1993
DIVISION OF
OIL, GAS & MINING

COMMENTS: PLEASE NOTE ADDRESS CHANGE. MOBIL ~~E&P~~ 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: 9/6/93

Name and Signature: Lowell B Sheffield

Telephone Number: 303 565 2212 ~~214 458 2528~~

(6/93)

FORM=NR0003.FRM 07/2

Sept 29, 1993

TO: Lisha Cordova - Utah Mining Oil & Gas

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

Here is copy of Ratherford Unit Successor Operator.

4 pages including this one.

Re: Rotherford Unit (GC)

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

ARES/543

JUL 26 1993

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

Dear Mr. Cox:

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

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

Sincerely,

ACTING Area Director

Enclosure

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS

DESIGNATION OF OPERATOR

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

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 14, 1993

By: M. B. Smith, J.
Attorney-in-Fact

Mobil Exploration and Producing
North America Inc.

June 11, 1993

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

ACTING AREA DIRECTOR 7/9/93
APPROVED BY TITLE 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, 1992)
SCHEDULE OF TRACT PERCENTAGE PARTICIPATION

Tract Number	Description of Land	Serial Number and Effective Date of Lease	Tract Percentage Participation
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) _____

XXX Other

OPERATOR CHANGE

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

2. DOGM Employee (name) L. CORDOVA (Initiated Call XXX)

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 OPERATORED BY MEPNA, CURRENTLY REPORTED OUT OF DALLAS (MCELMO CREEK).

Division of Oil, Gas and Mining
OPERATOR CHANGE WORKSHEET

Routing:

1-~~LEC~~ 7-SJ	
2-~~DTS~~ 8-RJF	
3-VLC	
4-RJF	
5-~~LEC~~	
6-PL	

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

XX 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) MEPNA
(address) PO DRAWER G
CORTEZ, CO 81321
GLEN COX (915)688-2114
phone (303) 565-2212
account no. N7370

FROM (former operator) PHILLIPS PETROLEUM COMPANY
(address) 5525 HWY 64 NBU 3004
FARMINGTON, NM 87401
PAT KONKEL
phone (505) 599-3452
account no. N0772(A)

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

Name: **SEE ATTACHED**	API: 43-037-31079	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

Lec 1. (Rule R615-8-10) Sundry or other legal documentation has been received from former operator (Attach to this form). (Req. 8-20-93) (6/93 Prod. Rpt. 8-16-93)

Lec 2. (Rule R615-8-10) Sundry or other legal documentation has been received from new operator (Attach to this form). (Req. 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: _____.

Lec 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.

Lec 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)

Lec 6. Cardex file has been updated for each well listed above. (O&G wells 10-6-93) (WIW's 10-26-93)

Lec 7. Well file labels have been updated for each well listed above. (O&G wells 10-6-93) (WIW's 10-26-93)

Lec 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)

Lec 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.

– OVER –

PERATOR CHANGE WORKSHEET (CONTINUED) Initial each item when completed. Write N/A if item is not applicable.

ENTITY REVIEW

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

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

BOND VERIFICATION (Fee wells only)

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

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

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

LEASE INTEREST OWNER NOTIFICATION RESPONSIBILITY

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

DTS 11-10-93

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

FILMING

✓ 1. All attachments to this form have been microfilmed. Date: 11-17 1993.

FILING

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

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

COMMENTS

931006 BIA/Bkm Approved 7-9-93.

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
~~14-03~~	~~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-12	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
17-34WC	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

FORM 10

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

MONTHLY OIL AND GAS PRODUCTION REPORT

OPERATOR NAME AND ADDRESS:

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

UTAH ACCOUNT NUMBER: N7370

REPORT PERIOD (MONTH/YEAR): 6 / 95

AMENDED REPORT ☐ **(Highlight Changes)**

Well Name / API Number / Entity / Location	Producing Zone	Well Status	Days Oper	Production Volumes OIL(BBL)	GAS(MCF)	WATER(BBL)
RATHERFORD UNIT 20-31 4303731050 06280 41S 24E 20	ISMY					
RATHERFORD UNIT 20-42 4303731051 06280 41S 24E 20	DSCR					
RATHERFORD UNIT 21-11 4303731052 06280 41S 24E 21	DSCR					
RATHERFORD UNIT 29-11 4303731053 06280 41S 24E 29	DSCR					
RATHERFORD UNIT #18-24 4303731079 06280 41S 24E 18	DSCR					
RATHERFORD UNIT #19-11 4303731080 06280 41S 24E 19	DSCR					
THERFORD UNIT #19-44 4303731081 06280 41S 24E 19	DSCR					
RATHERFORD UNIT #29-22 4303731082 06280 41S 24E 29	DSCR					
RATHERFORD UNIT 12-34 4303731126 06280 41S 23E 12	DSCR					
RATHERFORD UNIT 13-12 4303731127 06280 41S 23E 13	DSCR					
RATHERFORD UNIT #13-21 4303731128 06280 41S 23E 13	DSCR					
RATHERFORD UNIT #13-23 4303731129 06280 41S 23E 13	DSCR					
RATHERFORD UNIT 13-34 (RE-ENTRY) 4303731130 06280 41S 23E 13	DSCR					
			TOTALS			

)MMENTS: _____

_____

_____

ıe. .y certify that this report is true and complete to the best of my knowledge. Date: _____

me and Signature: _____ Telephone Number: _____

2/93)

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) _____

[XXX] Other

OPER NM CHG

_____

_____

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

2. DOGM Employee (name) L. CORDOVA (Initiated Call [ ])

Talked to:

Name R. J. FIRTH (Initiated Call [XX]) - Phone No. ( )

of (Company/Organization) _____

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

4. Highlights of Conversation:

OPERATOR NAME IS BEING CHANGED FROM M E P N A (MOBIL EXPLORATION AND PRODUCING NORTH AMERICA INC) TO MOBIL EXPLOR & PROD. THE NAME CHANGE IS BEING DONE AT THIS TIME TO ALLEVIATE CONFUSION, BOTH IN HOUSE AND AMONGST THE GENERAL PUBLIC.

*SUPERIOR OIL COMPANY MERGED INTO M E P N A 4-24-86 (SEE ATTACHED).

Division of Oil, Gas and Mining
OPERATOR CHANGE WORKSHEET

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

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

☐ Change of Operator (well sold) ☐ Designation of Agent
☐ Designation of Operator XXX Operator Name Change Only

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

TO (new operator) **MOBIL EXPLOR & PROD**
(address) **C/O MOBIL OIL CORP**
PO DRAWER G
CORTEZ CO 81321
phone (303) 564-5212
account no. N7370

FROM (former operator) **M E P N A**
(address) **C/O MOBIL OIL CORP**
PO DRAWER G
CORTEZ CO 81321
phone (303)564-5212
account no. N7370

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

Name: **** SEE ATTACHED ****	API: 037 31079	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.

Lec 5. Changes have been entered in the Oil and Gas Information System (Wang/IBM) for each well listed above. (8-3-95)

LWP 6. Cardex file has been updated for each well listed above. 8-31-95

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

Lec 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)

Lec 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.

– OVER –

OPERATOR CHANGE WORKSHEET (CONTINUED) Initial each item when completed. Write N/A if item is not applicable.

ENTITY REVIEW

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

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

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

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

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

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

LEASE INTEREST OWNER NOTIFICATION RESPONSIBILITY

N/A 1. (Rule R615-2-10) The former operator/lessee of any **fee lease** well listed above has been notified by letter dated _____ 19___, of their responsibility to notify any DTS 9/5/95 person with an interest in such lease of the change of operator. Documentation of such notification has been requested.

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

FILMING

✓ 1. All attachments to this form have been microfilmed. Date: 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 WIC F5/Not necessary!

ExxonMobil Production Compa
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

United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
Navajo Area Office
NAVAJO REGION
P.O. Box 1060
Gallup, New Mexico 87305-1060

IN REPLY REFER TO:

RRES/543

AUG 30 2001

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,

DENNIS 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
NATV AM MIN COORD
SOLID MIN TEAM
PETRO MGMT TEAM
O & G INSPECT TEAM
ALL TEAM LEADERS
LAND RESOURCES
ENVIRONMENT
FILES

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

PBS 7/12/2001

GN
543
File

June 27, 2001

ExxonMobil
Production

Certified Mail
Return Receipt Requested

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

Change of Name –
Mobil Oil Corporation to
ExxonMobil Oil Corporation

Dear Ms. Denetsone:

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

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

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

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

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

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

Very truly yours,

Charlotte H. Harper

Charlotte H. Harper
Permitting Supervisor

Attachments

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

NOTE: Check forwarded to Ella Jossie

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

Gentlemen:

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

OFFICERS

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

DIRECTORS

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

Sincerely,

Alex Correa

This is to certify that the above information pertaining to ExxonMobil Oil Corporation (Corporation) is trust 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

(CORPORATE SEAL)

Signature

AGENT AND ATTORNEY IN FACT
Title

SAL

CERTIFICATION

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

CHANGE OF COMPANY NAME

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

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

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

ExxonMobil Oil Corporation",

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

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

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

D. A. Millican
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

[illegible] South, Suite 1500, Houston, Texas 77027-3301
[illegible] 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, Assistant Secretary

Frank E. Robertson, Vice President

STATE OF NEW JERSEY }
County of Somerset } ss.

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 that he signed his name thereto subscribed by authority of said Companies and in deponent's presence.

Karen A. Price

KAREN A. PRICE NOTARY PUBLIC NEW JERSEY

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

Notary Public

CERTIFICATION

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.

FEDERAL INSURANCE COMPANY INDIANA

PACIFIC INDEMNITY COMPANY INCORPORATED AUG. 10, 1926 WISCONSIN

VIGILANT INSURANCE COMPANY NEW YORK

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

15-10-0225 (Ed. 4-99) CONSENT

F010601000187

CSC 45

CERTIFICATE OF AMENDMENT

OF

CERTIFICATE OF INCORPORATION

OF

MOBIL OIL CORPORATION

(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.

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. Risch, 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

JANICE M. PHILLIPS
MY COMMISSION EXPIRES
May 16, 2002

CSC 5184334741 06/01 '01 09:01 NO.411 02/02

CSC

06/01 '01 09:06 NO.135 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 JUN 01 2001
TAX $
BY: SAC

NY | Albany

Filed by: EXXONMOBIL CORPORATION
(Name)

6959 Las Colinas Blvd.
(Mailing address)

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

Cust Ref# 165578 MPJ

RECEIVED
JUL 05 2001
... REAL ESTATE SERVICES

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

STATE OF NEW YORK ★ DEPARTMENT OF STATE ★ EXCELSIOR

Special Deputy Secretary of State

DOS-1266 (7/00)

Division of Oil, Gas and Mining

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 17-33	17-41S-24E	43-037-31134	6280	INDIAN	OW	P
RATHERFORD UNIT 17-11	17-41S-24E	43-037-31169	6280	INDIAN	OW	S
RATHERFORD UNIT 17-22	17-41S-24E	43-037-31170	6280	INDIAN	OW	P
RATHERFORD UNIT 17-42	17-41S-24E	43-037-31177	6280	INDIAN	OW	P
RATHERFORD UNIT 17-31	17-41S-24E	43-037-31178	6280	INDIAN	OW	P
18-11	18-41S-24E	43-037-15733	6280	INDIAN	OW	P
RATHERFORD 18-13	18-41S-24E	43-037-15734	6280	INDIAN	OW	P
RATHERFORD UNIT 18-44	18-41S-24E	43-037-31045	6280	INDIAN	OW	P
RATHERFORD UNIT 18-24	18-41S-24E	43-037-31079	6280	INDIAN	OW	P
RATHERFORD UNIT 18-33	18-41S-24E	43-037-31135	6280	INDIAN	OW	P
RATHERFORD UNIT 18-31	18-41S-24E	43-037-31181	6280	INDIAN	OW	P
RATHERFORD UNIT 18-42	18-41S-24E	43-037-31182	6280	INDIAN	OW	P
RATHERFORD UNIT 18-22	18-41S-24E	43-037-31236	6280	INDIAN	OW	P
19-42	19-41S-24E	43-037-30916	6280	INDIAN	OW	P
RATHERFORD UNIT 19-22	19-41S-24E	43-037-31046	6280	INDIAN	OW	P
RATHERFORD UNIT 19-31	19-41S-24E	43-037-31047	6280	INDIAN	OW	P
RATHERFORD UNIT 19-33	19-41S-24E	43-037-31048	6280	INDIAN	OW	P
RATHERFORD UNIT 19-11	19-41S-24E	43-037-31080	6280	INDIAN	OW	P
RATHERFORD UNIT 19-44	19-41S-24E	43-037-31081	6280	INDIAN	OW	P
RATHERFORD 19-97	19-41S-24E	43-037-31596	6280	INDIAN	OW	P

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 06/29/2001
2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 06/29/2001
3. The new company has been checked through the **Department of Commerce, Division of Corporations Database on:** 04/09/2002
4. Is the new operator registered in the State of Utah: YES Business Number: 579865-0143
5. If **NO**, the operator was contacted 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:** 04/15/2002
2. Changes have been entered on the **Monthly Operator Change Spread Sheet on:** 04/15/2002
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:

Division of Oil, Gas and Mining

OPERATOR CHANGE WORKSHEET

ROUTING
1. DJJ
2. CDW

X Change of Operator (Well Sold) Operator Name Change/Merger

The operator of the well(s) listed below has changed, effective: **6/1/2006**

FROM: (Old Operator):	**TO:** (New Operator):
N1855-ExxonMobil Oil Corporation	N2700-Resolute Natural Resources Company
PO Box 4358	1675 Broadway, Suite 1950
Houston, TX 77210-4358	Denver, CO 80202
Phone: 1 (281) 654-1936	Phone: 1 (303) 534-4600

CA No. **Unit:** **RATHERFORD**

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 4/21/2006
2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 4/24/2006
3. The new company was checked on the **Department of Commerce, Division of Corporations Database on:** 6/7/2006
4. Is the new operator registered in the State of Utah: YES Business Number: 5733505-0143
5. If **NO**, the operator was contacted contacted on:

6a. (R649-9-2)Waste Management Plan has been received on: requested

6b. Inspections of LA PA state/fee well sites complete on: n/a

6c. Reports current for Production/Disposition & Sundries on: ok

7. **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
8. **Federal and Indian Units:** The BLM or BIA has approved the successor of unit operator for wells listed on: not yet
9. **Federal and Indian Communization Agreements ("CA"):** The BLM or BIA has approved the operator for all wells listed within a CA on: n/a
10. **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:

1. Changes entered in the **Oil and Gas Database on:** 6/22/2006
2. Changes have been entered on the **Monthly Operator Change Spread Sheet on:** 6/22/2006
3. Bond information entered in RBDMS on: n/a
4. Fee/State wells attached to bond in RBDMS on: n/a
5. Injection Projects to new operator in RBDMS on: 6/22/2006
6. Receipt of Acceptance of Drilling Procedures for APD/New on: n/a

BOND VERIFICATION:

1. Federal well(s) covered by Bond Number: n/a
2. Indian well(s) covered by Bond Number: PA002769
3. (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number n/a

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:

4. (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:

FORM 9

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

5. LEASE DESIGNATION AND SERIAL NUMBER:	See attached list
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	Navajo Tribe
7. UNIT or CA AGREEMENT NAME:	Ratherford Unit
8. WELL NAME and NUMBER:	See attached list
9. API NUMBER:	Attached
10. FIELD AND POOL, OR WILDCAT:	Greater Aneth

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 ☐ GAS WELL ☐ OTHER Unit Agreement

2. NAME OF OPERATOR: Resolute Natural Resources Company N2700

3. ADDRESS OF OPERATOR: 1675 Broadway, Suite 1950 CITY Denver STATE CO ZIP 80202 PHONE NUMBER: (303) 534-4600

4. LOCATION OF WELL
FOOTAGES AT SURFACE: See attached list COUNTY: San Juan
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: STATE: UTAH

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

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

SIGNATURE Dwight E Mallory DATE 4/20/2006

(This space for State use only)

APPROVED 6/27/06
Earlene Russell
Division of Oil, Gas and Mining
Earlene Russell, Engineering Technician

RECEIVED
APR 24 2006
DIV. OF OIL, GAS & MINING

(5/2000) (See Instructions on Reverse Side)

FORM 9

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

5. LEASE DESIGNATION AND SERIAL NUMBER:

SUNDRY NOTICES AND REPORTS ON WELLS

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ship Rock

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

7. UNIT or CA AGREEMENT NAME: UTU68931A

1. TYPE OF WELL: OIL WELL ☑ GAS WELL ☐ OTHER

8. WELL NAME and NUMBER: Ratherford

2. NAME OF OPERATOR: ExxonMobil Oil Corporation N1855

9. API NUMBER: attached

3. ADDRESS OF OPERATOR: P.O. Box 4358 CITY Houston STATE TX ZIP 77210-4358

PHONE NUMBER: (281) 654-1936

10. FIELD AND POOL, OR WILDCAT: Aneth

4. LOCATION OF WELL

FOOTAGES AT SURFACE:

COUNTY: San Juan

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:

STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
☑ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start: 6/1/2006	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☑ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☐ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
Date of work completion:	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☐ OTHER:
	☐ CONVERT WELL TYPE	☐ 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) Laurie Kilbride TITLE Permitting Supervisor

SIGNATURE Laurie B. Kilbride DATE 4/19/2006

(This space for State use only)

APPROVED 6/27/06
Earlene Russell
Division of Oil, Gas and Mining
Earlene Russell, Engineering Technician

(See Instructions on Reverse Side)

RECEIVED
APR 21 2006
DIV. OF OIL, GAS & MINING

(5/2000)

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	SENW	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	SENW	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	SENW	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