

FILE NOTATIONS

Entered in N I D File

Entered On S R Sheet \_\_\_\_\_

Location Map Pinned \_\_\_\_\_

Card Indexed

I W R for State or Fee Land \_\_\_\_\_

Checked by Chief \_\_\_\_\_

Copy N I D to Field Office \_\_\_\_\_

Approval Letter \_\_\_\_\_

Disapproval Letter \_\_\_\_\_

COMPLETION DATA:

Date Well Completed \_\_\_\_\_

OW \_\_\_\_\_ WW \_\_\_\_\_ TA \_\_\_\_\_

GW \_\_\_\_\_ OS \_\_\_\_\_ PA \_\_\_\_\_

Location Inspected \_\_\_\_\_

Bond released \_\_\_\_\_

State of Fee Land \_\_\_\_\_

LOGS FILED

Driller's Log \_\_\_\_\_

Electric Logs (No. ) \_\_\_\_\_

E \_\_\_\_\_ I \_\_\_\_\_ E-I \_\_\_\_\_ GR \_\_\_\_\_ GR-N \_\_\_\_\_ Micro \_\_\_\_\_

Lat \_\_\_\_\_ Mi-L \_\_\_\_\_ Sonic \_\_\_\_\_ Others \_\_\_\_\_

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL & GAS

5. Lease Designation and Serial No.

U-15054

6. If Indian, Allottee or Tribe Name

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work

DRILL

DEEPEN

PLUG BACK

b. Type of Well

Oil Well

Gas Well

Other

Single Zone

Multiple Zone

2. Name of Operator

Walter D. Broadhead

7. Unit Agreement Name

8. Farm or Lease Name

ARI-MEX

9. Well No.

Federal Reina No. 1

3. Address of Operator

1645 N. 7th St., Grand Junction, Colorado 81501

10. Field and Pool, or Wildcat

Sage

4. Location of Well (Report location clearly and in accordance with any State requirements.)\*

At surface

900' FWL, 2340' FSL

11. Sec., T., R., M., or Blk. and Survey or Area

Sec. 14, T20S, R24E SLM

At proposed prod. zone

900' FWL, 2340' FSL

14. Distance in miles and direction from nearest town or post office\*

Cisco, Utah 7 miles westerly

12. County or Parrish 13. State

Grand Utah

15. Distance from proposed\* location to nearest property or lease line, ft.

300'

16. No. of acres in lease

1,487.06 Acres

17. No. of acres assigned to this well

10

18. Distance from proposed location\* to nearest well, drilling, completed, or applied for, on this lease, ft.

19. Proposed depth

800

20. Rotary or cable tools

Rotary

21. Elevations (Show whether DF, RT, GR, etc.)

4495'(GR)

22. Approx. date work will start\*

June 20, 1977

23. PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
8-3/4"	7" new	17 lb.	100'	25 SX Circulated
6-1/4"	4 1/2" new	9.5 lb.	800	40 SX

Surface Formation: MANCOS

Propose to test Dakota & Cedar Mountain Formations

Surface Use Plan Attached:

Estimated Tops:

Dakota 450 Oil Note: Water Sands not anticipated

Buckhorn 750 Oil

Pressure Control: Schematic attached showing BOP, Kill lines, check valves and pressure ratings. Seven Point Plan also attached.

Logging: IES and FDC. No Coring Planned

Hazards: Experience does not indicate that abnormal pressures or Hydrogen Sulfide will be encountered.

Starting Date: June 25, 1977, ten days operating time.

*Approval notice - Utah State Oil & Gas*

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

*Walter D Broadhead*

Title

*operator*

Date

*6-17-77*

(This space for Federal or State office use)

Permit No.

*43-019-30374*

Approval Date

Approved by *(ORIG. SGD.) E. W. GUYNN*

Title

*DISTRICT ENGINEER*

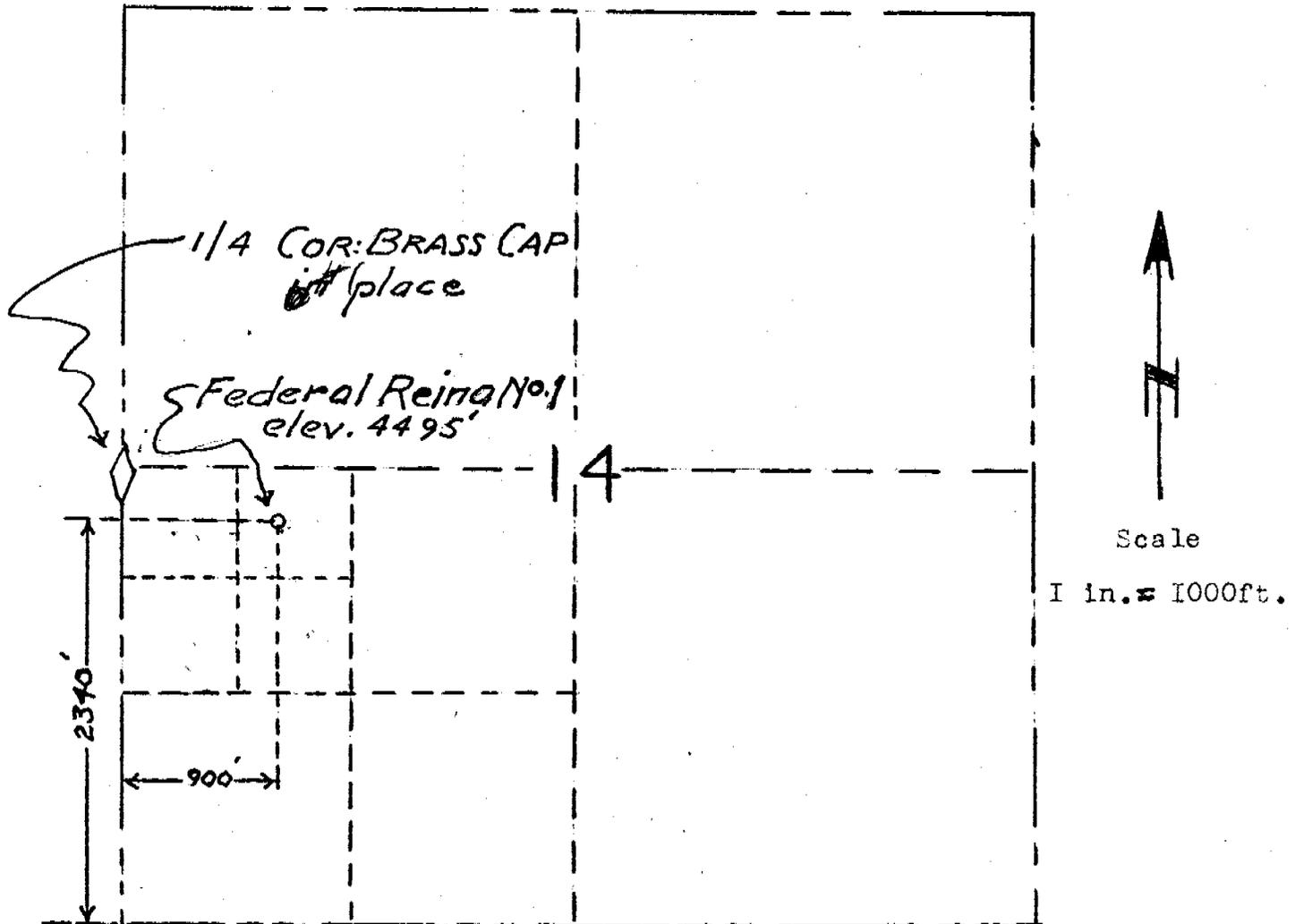
Date

*AUG 25 1977*

Conditions of approval, if any:

WELL LOCATION  
Federal Reins No 1  
in the

NE $\frac{1}{4}$  NW $\frac{1}{4}$  SW $\frac{1}{4}$  of Section 14, T 20 S. R 24 E  
of the Salt Lake Meridian  
900 ft. East of the West line and 2340  
ft. North of the South line of said  
Section 14.



Dated June 21, 1977

Surveyed, drawn and certified by H. D. Clark

Signed Henry Dennis Clark

Colorado Registered Land Surveyor  
No. 689

WALTER BROADHEAD  
1645 N. 7th St.  
Grand Junction, Colorado 81501

Re: Well No. Fed Reina No. 1  
Sec. 14, T20S, R24E, SLB&M  
Grand County, Utah  
Lease: U-1505-4

PRESSURE MONITORING AND CONTROL DATA  
SEVEN POINT PLAN

1. Surface Casing: Set at ~~200'~~ 100'  
Size 7"  
Weight 17 lb.  
Length Range 2  
Grade J-55 new. Tested to 3000 psig.
2. Casing Heads:  
Series 600 - 1500 psi working pressure.
3. Production Casing:  
Size 4-1/2" ✓  
Weight 9.5 lb.  
Length Range 3  
Grade J-50, new, tested to 3000 psig.
4. Pressure Control:  
BOP Regan Torus BOP  
Series 600 - Tested to 3000 psig.  
Rams One size fits all - even blind.  
Will use fill, kill and choke lines.
5. Auxiliary Pressure Control:
  - a. Kelly cocks.
  - b. Check valve at bit.
  - c. Monitoring equipment on mud system.
  - d. A sub on floor with a full opening valve to be stabbed into drill pipe when Kelly is out of string.
6. Anticipated Bottom Hole Pressure:  
550 psig.
7. The Type of Drilling Fluid:  
Air until gas encountered. - Gel  
Mud up with Polymer mud with NaCl and CaCl<sub>2</sub> as weighting agent - 10.5 to 11.00 lb. per gal. as required.

WALTER BROADHEAD  
1645 N. 7th St.  
Grand Junction, Colorado 81501

Re: Well No. Fed Reina No. 1

Sec. 24, T20S, R24E, SLB&M

Grand County, Utah

Lease: U-15054

SURFACE USE PLAN

Geographical: 8 miles east of Cisco, Utah

Terrain: Low, rolling hills of Mancos shale.

Vegetation: Very sparse.

Surface Water: None. This is dry, desolate, desert country.

1. Existing Roads: Existing roads are 15-18 feet wide, with native ground as surface material. This is primarily Mancos shale with a little Cretaceous gravel in some places.

The included map shows all access roads and roads within a several mile radius of the locations.

There are no immediate plans for improvement of existing roads. If commercial production is found and road improvement is needed, it will be considered at the appropriate time.

2. Planned Access Roads: The map indicates all necessary access roads be constructed which will be to the same physical characteristics as existing roads - 15-18 feet wide with native Mancos Shale as surface with maximum grades not to exceed 3-4%. There will be no culverts required and no major cuts and fills required for access to any of the wells applied for. No fence cuts or cattle guards will be required.
3. Location of Existing Wells: As you can see from the map, existing wells have been located upon the map. The status of the wells is generally indicated on the map by the manner in which the well is marked. There are no water wells or disposal wells. The wells applied for in this application have been referenced in two directions with reference stakes set at 100 and 150 feet in two directions giving a total reference of 300 feet for each well.

4. Location of Existing and/or Proposed Facilities:

- a) There are no tank batteries off of well locations within a one mile radius of the proposed locations. Gas gathering lines are indicated on the attached map.
- b) If production is found, storage facilities will be located on the location. If gas is discovered in commercial quantities, necessary pipelines will be applied for at that time.

Complete protective measures such as fences will be used to protect livestock and wildlife in the area.

- c) Rehabilitation of all disturbed areas no longer needed after construction is completed will be returned to smooth contour and all debris will be cleaned up. All pits will be covered and cleaned up after drill operations. Those pits required for production will be fenced.

5. Location and Type of Water Supply: Water will be acquired from the Colorado River, which is about 5 miles southwest of Cisco, Utah. Water will be transported by truck. Existing roads will be used to transport water.

No water well will be drilled on the lease.

6. Source of Construction Materials: No construction materials such as sand, gravel, stone and soil will be used other than that found in the native location.

In the event that tanks and production equipment are required, gravel will be hauled from Grand Junction, Colorado to set tanks on. This gravel will be purchased from private enterprise.

7. Methods for Hauling Waste Disposal:

- a) Cuttings - The hole will be 90% air drilled and cuttings will be blown out on the ground. These cuttings will be smoothed out and integrated into the native ground surface.
- b) Drilling Fluids - Will be contained in steel mud tanks. A dirt pit will be dug to contain excess flow out of the well during cementing and completion operations. Of course, these pits will be cleaned up and covered up.
- c) Produced Fluids such as Oil and Water - Will be properly disposed of with oil being stored in tanks and water being diverted to the pit and disposed of as required.
- d) Sewage - There will be no sewage generated by the short drilling operations.
- e) Garbage and Other Waste Material - Will be contained in 30 gallon galvanized garbage cans and hauled off the location.

SURFACE USE PLAN (cont)

- f) As stated before, the entire well site area will be properly cleaned up and restored to smooth contour when the rig moves out. Only that part of the location required for production operations will be kept in use. In the event of a dry hole, the only appurtenance left at the location will be the required dry hole marker.
8. Ancillary Facilities: There will be no camps or air strips required for this drilling operation.
9. Well Site Layout: A plat on a scale of 1" = 20' is included with the application showing location and orientation of the drilling rig, mud tanks, reserve pit, pipe racks and other appurtenances to the operation. For the time being pits will be unlined as allowed by present law. The only water introduced into these pits will be fresh water used in the drilling operation.
10. Plans for Restoration of Surface: As stated before, the entire location will be restored to smooth contour. Also stated, the vegetation in this desert area is extremely sparse and it is quite doubtful that revegetation would be practical at all.

It is intended to have all locations cleaned up within 30 days after operations are concluded.

11. Other Information:

- a) The topography of these locations near Cisco, Utah is a very gentle rolling, flat characteristic. The soil is raw Mancos shale with extremely sparse vegetation. A few coyotes, prairie dogs and cottontail rabbits occupy the entire area.
- b) The only other surface use activities other than petroleum exploration in the area is in spring grazing of the sparse vegetation by cattle and sheep.
- c) The proximity of water has been described at the Colorado River which is about 5 miles southwest of Cisco, Utah. The only occupied dwellings are at Cisco, Utah, which has been located already. There will be no disturbance to archeological, historical or cultural sites by drilling the applied-for wells in the present applications. The land is under the jurisdiction of the Bureau of Land Management.

12. Operator's Representative:

Walter D. Broadhead  
1645 North 7th Street  
Grand Junction, Colorado 81501  
(303) 242-7717

13. I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Walter Broadhead in conformity with this plan and the terms and conditions under which it is approved.

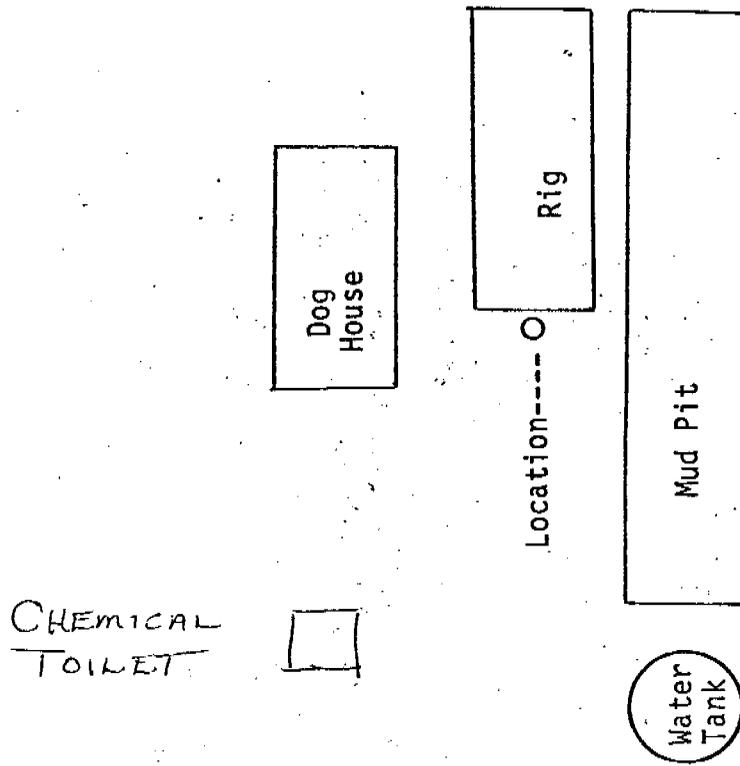
6-17-77

Date

Walter D. Broadhead

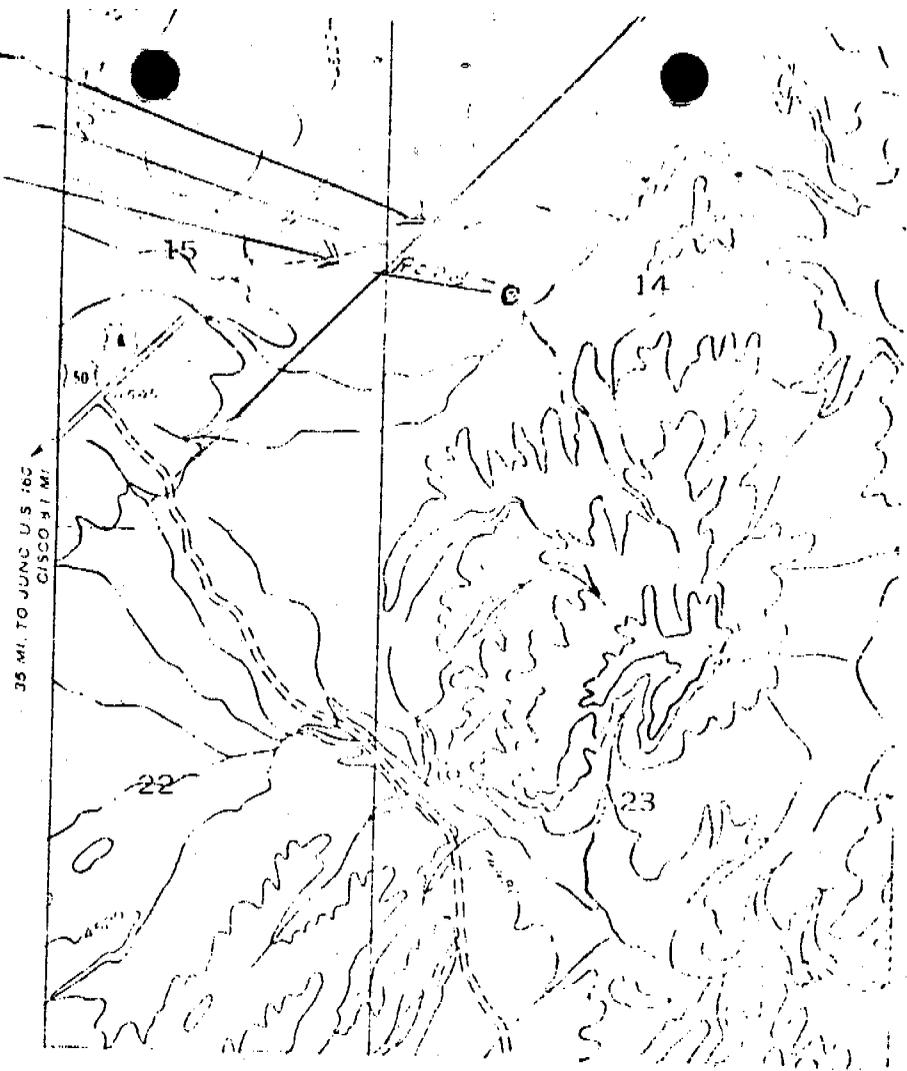
Walter D. Broadhead  
Consulting Engineer

WELL SITE LAYOUT



Scale 1" = 10 Feet

1403 WEST  
PIPE LINE  
LOCATION:  
New Head  
1000 FT



LOCATION AND VICINITY MAP

FOR

COMPANY Walter D. Broadhead

LEASE W-15054

WELL NO. Fed Reina No-1

SEC. 14 T 20S R 24E

LOCATION 900 FEET FROM West LINE

2340 FEET FROM South LINE

ELEVATION \_\_\_\_\_ GR

USGS QUADRANGLE Westwater 4 SW Plat

U.S. GEOLOGICAL SURVEY, CONSERVATION DIVISION

FROM: DISTRICT GEOLOGIST, SALT LAKE CITY, UTAH

TO: DISTRICT ENGINEER, SALT LAKE CITY, UTAH

Well	Location	Lease No.
WALTER D. BROADHEAD FEDERAL REINA No. 1	900' FWL & 2340' FSL (NW 1/4 SW 1/4) SEC. 14, T. 20S, R. 24E, SLM GRAND Co., UTAH	U-15054
<p>1. <b>Stratigraphy and Potential Oil and Gas Horizons.</b> The well will spud in Mancos shale and the Dakota and Cedar Mountain Formations will be tested. Operators estimated tops appear reasonable (Dakota 450' &amp; Buckhorn 750').</p> <p>2. <b>Fresh Water Sands.</b> Fresh or usable water could occur in the sands of the Mancos shale, Dakota sandstone and the conglomerate member of the Cedar Mountain shale. Operator does not anticipate water sands.</p> <p>3. <b>Other Mineral Bearing Formations. (Coal, Oil Shale, Potash, Etc.)</b> Land is considered valuable prospectively for coal found in the Mancos Formation (Ferron sandstone member). Coals are probably thin with marginal value.</p> <p>4. <b>Possible Lost Circulation Zones.</b> Unknown.</p> <p>5. <b>Other Horizons Which May Need Special Mud, Casing, or Cementing Programs.</b> Protect any usable aquifers.</p> <p>6. <b>Possible Abnormal Pressure Zones and Temperature Gradients.</b> Operator does not anticipate abnormal pressures.</p> <p>7. <b>Competency of Beds at Proposed Casing Setting Points.</b> Weathered shale will be cased off.</p> <p>8. <b>Additional Logs or Samples Needed.</b> None</p> <p>9. <b>References and Remarks</b> Within KGS.</p>		
Date: JUL 18 1977		Signed: R.E.G.

Cons. Comm'n, OGM

# DESIGNATION OF OPERATOR

The undersigned is, on the records of the Bureau of Land Management, holder of lease

DISTRICT LAND OFFICE: Utah Land Office  
SERIAL NO.: U 15054

and hereby designates

NAME: Walter D. Broadhead  
ADDRESS: 6145 N. 7th Street  
Grand Junction, Colorado 81501

as his operator and local agent, with full authority to act in his behalf in complying with the terms of the lease and regulations applicable thereto and on whom the supervisor or his representative may serve written or oral instructions in securing compliance with the Operating Regulations with respect to (describe acreage to which this designation is applicable):

T20S, R24E, SLM Utah  
Sec. 1, Lots 1, 2, 5, SW $\frac{1}{4}$  NE $\frac{1}{4}$ ;  
Sec. 3, Lots 3, 4;  
Sec. 4, Lots 1, 2, 3, S $\frac{1}{2}$  NE $\frac{1}{4}$ , SE $\frac{1}{4}$  NW $\frac{1}{4}$ ;  
Sec. 13, W $\frac{1}{2}$ ;  
Sec. 14, S $\frac{1}{2}$ ;  
Sec. 21, SE $\frac{1}{4}$ ;  
Sec. 23, N $\frac{1}{2}$  N $\frac{1}{2}$ .  
1,487.06 Acres

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

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

The lessee agrees promptly to notify the supervisor of any change in the designated operator.

ARI-MEX OIL & EXPLORATION, INC.

By

  
President

ORIGINATOR NAME

President

Jan. 15, 1977  
(Date)

Box 249 Moab, Utah 84532  
(Address)

STATE OF UTAH  
DIVISION OF OIL, GAS, AND MINING

\*\* FILE NOTATIONS \*\*

Date: June 29 -  
Operator: Walter S. Broadhead  
Well No: Fed. Basin #1  
Location: Sec. 14 T. 20 S R. 24 E County: Grand

File Prepared   
Card Indexed

Entered on N.T.D.   
Completion Sheet

CHECKED BY:

Administrative Assistant [Signature]

Remarks: #1, Sec. 14 - NESW 1/4, Oil Well

Petroleum Engineer ok Pat

Remarks: A production story of 7-46 will be accepted at proposed depth

Director 2

Remarks:

INCLUDE WITHIN APPROVAL LETTER:

Bond Required  1000' Survey Plat Required

Order No. 102-5  Surface Casing Charge to

Rule C-3(c), Topographic exception/company owns or controls acreage within a 660' radius of proposed site

O.K. Rule C-3  O.K. In \_\_\_\_\_ Unit

Other:

Letter written/Approved

June 29, 1977

Walter D. Broadhead  
1645 N. 7th Street  
Grand Junction, Colorado 81501

Re: Well No. Federal Reina #1  
Sec. 14, T. 20 S, R. 24 E,  
Grand County, Utah

Gentlemen:

Insofar as this Division is concerned, approval to drill the above referred to well is hereby granted in accordance with the Order issued in Cause No. 102-5.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

PATRICK L. DRISCOLL - Chief Petroleum Engineer  
HOME: 582-7247  
OFFICE: 533-5771

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling.

Further, it is requested that this Division be notified within 24 hours after drilling operations commence, and that the rig number and drilling contractor be identified.

The API number assigned to this well is 43-019-30374.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

CLEON B. FEIGHT  
Director

cc: U.S. Geological Survey

July 1, 1977

Mr. Walter D. Broadhead  
1645 N. 7th Street  
Grand Junction, Colorado

Re: Federal Reina #1  
Sec. 14, T. 20 S, R. 24 E,  
Grand County, Utah

Gentlemen:

I've reviewed and approved the above application, and noted that your proposal calls for J-55 casing on both the surface casing and the production string.

If it is feasible to obtain, and the price differential would warrant, this Division will accept H-40 pipe in lieu of J-55.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

PATRICK L. DRISCOLL  
Chief Petroleum Engineer

PLD/sw

ATTACHMENT 2-A

SUMMARY OF ENVIRONMENTAL IMPACT EVALUATION EIA NO. 601

DATE 7-4-77

OPERATOR Broadhead  
 LEASE # U15054  
 WELL NO. Foot line #1  
 LOC. 1/4 NW SW SEC. 14  
T. 20S R. 24E  
 COUNTY Grand STATE Ut  
 FIELD Sage  
 USGS Cook  
 BLM Crimmitt  
 REP: Broadhead  
 DIRT

	Construction		Pollution		Drilling Production			Transport Operations		Accidents		Others						
	Roads, bridges, airports	Transmission lines, pipelines	Dams & impoundments	Others (pump stations, compressor stations, etc.)	Burning, noise, junk disposal	Liquid effluent discharge	Subsurface disposal	Others (toxic gases, noxious gas, etc.)	Well drilling	Fluid removal (Prod. wells, facilities)	Secondary Recovery	Noise or obstruction of scenic views	Mineral processing (ext. facilities)	Others	Trucks	Pipelines	Others	Spills and leaks

- ENHANCES
- NO IMPACT
- MINOR IMPACT
- MAJOR IMPACT

Land Use	Forestry	NA																		
	Grazing	✓	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	Wilderness	NA																		
	Agriculture	NA																		
	Residential-Commercial	NA																		
	Mineral Extraction	NA																		
	Recreation	✓	0	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	Scenic Views	✓	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	Parks, Reserves, Monuments	NA																		
	Historical Sites	none known																		
Unique Physical Features	NA																			
Flora & Fauna	Birds	✓	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
	Land Animals	✓	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
	Fish	NA																		
	Endangered Species	none known																		
	Trees, Grass, Etc.	✓	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
Phy. Charact.	Surface Water	NA																		
	Underground Water	R																		
	Air Quality	✓	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
	Erosion	✓	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
	Other																			
Effect On Local Economy	✓	0	0					0						0						
Safety & Health	✓	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
Others																				

B & M Minerals  
 Conservation Dept  
 file

LEASE U-15054 DATE 8-4-77WELL NO. Federal ~~Leasing~~ #1LOCATION: NW 1/4 SW 1/4, SEC. 14, T. 20S, R. 24EFIELD Sage COUNTY Grand STATE UtahENVIRONMENTAL IMPACT ANALYSIS - ATTACHMENT 2-BI. PROPOSED ACTION

Walter D. Broadhead PROPOSES TO DRILL AN OIL AND  
 (COMPANY)  
 GAS TEST WELL WITH ROTARY TOOLS TO ABOUT 800 FT. TD. 2) TO CONSTRUCT A

DRILL PAD 60 FT. X 80 FT. AND A RESERVE PIT 10 FT. X 30 FT.

3) TO CONSTRUCT 12 FT. WIDE X 900ft ~~MILES~~ ACCESS ROAD AND UPGRADE

FT. WIDE X \_\_\_\_\_ MILES ACCESS ROAD FROM AN EXISTING AND IMPROVED ROAD, TO CONSTRUCT

GAS  OIL PRODUCTION FACILITIES ON THE DISTURBED AREA FOR THE DRILL PAD

AND  TRUCK  TRANSPORT THE PRODUCTION THROUGH A PIPELINE TO A TIE-IN IN

SECTION \_\_\_\_\_, T. \_\_\_\_\_, R. \_\_\_\_\_

2. LOCATION AND NATURAL SETTING (EXISTING ENVIRONMENTAL SITUATION).

(1) TOPOGRAPHY:  ROLLING HILLS  DISSECTED TOPOGRAPHY  DESERT  
 OR PLAINS  STEEP CANYON SIDES  NARROW CANYON FLOORS  DEEP DRAINAGE  
 IN AREA  SURFACE WATER \_\_\_\_\_

(2) VEGETATION:  SAGEBRUSH  PINION-JUNIPER  PINE/FIR  FARMLAND  
 (CULTIVATED)  NATIVE GRASSES  OTHER salt brush

(3) WILDLIFE:  DEER  ANTELOPE  ELK  BEAR  SMALL  
MAMMAL  BIRDS  ENDANGERED SPECIES  OTHER \_\_\_\_\_

(4) LAND USE:  RECREATION  LIVESTOCK GRAZING  AGRICULTURE  
 MINING  INDUSTRIAL  RESIDENTIAL  OIL & GAS OPERATIONS

REF: BLM UMBRELLA EAR *Oil & Gas Leasing Program*  
~~USES EAR~~ *and Grand Resource area 8-13-75*  
~~OTHER ENVIRONMENTAL ANALYSIS~~

3. Effects on Environment by Proposed Action (potential impact)

1) EXHAUST EMISSIONS FROM THE DRILLING RIG POWER UNITS AND SUPPORT TRAFFIC ENGINES WOULD ADD MINOR POLLUTION TO THE ATMOSPHERE IN THE LOCAL VICINITY,

2) MINOR INDUCED AND ACCELERATED EROSION POTENTIAL DUE TO SURFACE DISTURBANCE AND SUPPORT TRAFFIC USE.

3) MINOR VISUAL IMPACTS FOR A SHORT TERM DUE TO OPERATIONAL EQUIPMENT AND SURFACE DISTURBANCE.

4) TEMPORARY DISTURBANCE OF WILDLIFE AND LIVESTOCK.

5) MINOR DISTRACTION FROM AESTHETICS FOR SHORT TERM.

6)

4. Alternatives to the Proposed Action

1) NOT APPROVING THE PROPOSED PERMIT -- THE OIL AND GAS LEASE GRANTS THE LESSEE EXCLUSIVE RIGHT TO DRILL FOR, MINE, EXTRACT, REMOVE AND DISPOSE OF ALL OIL AND GAS DEPOSITS.

2) DENY THE PROPOSED PERMIT AND SUGGEST AN ALTERNATE LOCATION TO MINIMIZE ENVIRONMENTAL IMPACTS. NO ALTERNATE LOCATION ON THIS LEASE WOULD JUSTIFY THIS ACTION.

3) LOCATION WAS MOVED \_\_\_\_\_ TO AVOID \_\_\_\_\_  
 LARGE SIDHILL CUTS     NATURAL DRAINAGE     OTHER \_\_\_\_\_

4) \_\_\_\_\_

5. Adverse Environmental Effects Which Cannot Be Avoided

1) MINOR AIR POLLUTION DUE TO EXHAUST EMISSIONS FROM RIG ENGINES AND SUPPORT TRAFFIC ENGINES.

2) MINOR INDUCED AND ACCELERATED EROSION POTENTIAL DUE TO SURFACE DISTURBANCE AND SUPPORT TRAFFIC USE.

3) MINOR AND TEMPORARY DISTURBANCE OF WILDLIFE.

4) TEMPORARY DISTURBANCE OF LIVESTOCK.

5) MINOR AND SHORT-TERM VISUAL IMPACTS.

6) \_\_\_\_\_

6. DETERMINATION:

(THIS REQUESTED ACTION ~~(DOES)~~ (DOES NOT) CONSTITUTE A MAJOR FEDERAL ACTION SIGNIFICANTLY AFFECTING THE ENVIRONMENT IN THE SENSE OF NEPA, SECTION 102(2) (c).

DATE INSPECTED 8-4-77

INSPECTOR A.H. Cook

E.W. Snyman

U. S. GEOLOGICAL SURVEY  
CONSERVATION DIVISION - OIL & GAS OPERATIONS  
SALT LAKE CITY DISTRICT



CALVIN L. RAMBTON  
Governor

GORDON E. HARMSTON  
Executive Director  
NATURAL RESOURCES

CLEON B. FEIGHT  
Director

OIL, GAS, AND MINING BOARD

GUY N. CARDON  
Chairman

CHARLES R. HENDERSON  
ROBERT R. NORMAN  
JAMES P. COWLEY  
HYRUM J. LEE

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS, AND MINING

1588 West North Temple  
Salt Lake City, Utah 84116

June 12, 1978

Walter D. Broadhead  
1645 N. 7th St.  
Grand Junction, Colorado 81501

Re: Please see attached sheet for list  
of wells and months due--

Gentlemen:

Our records indicate that you have not filed a Monthly Report of Operations for the months indicated above on the subject well(s).

Rule C-23, General Rules and Regulations and Rules of Practice and Procedure, requires that said reports be filed in or before the sixteenth day of the succeeding month. This report may be filed on Form O-G-16, U.S. Geological Survey Form 9-351, "Sundry Notices and Reports to Wells", or on company forms containing substantially the same information. We are enclosing forms for your convenience.

Your prompt attention to the above will be greatly appreciated.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

KATHY OSTLER  
RECORDS CLERK

POOR COPY

Well No. Patsantaras #1  
Sec. 7, T. 20S, R. 24E,  
Grand County, Utah - WELL COMPLETION REPORT DUE  
THIRD REQUEST

✓ Well No. Federal Reina #1  
Sec. 14, T. 20S, R. 24E,  
Grand County, Utah - Aug. 77 thru' May 78

Well No. Ari-Mex Federal Sussex #1  
Sec. 22, T. 20S, R. 24E,  
Grand County, Utah - WELL COMPLETION REPORT DUE

Well No. Broadhead Federal #2  
Sec. 6, T. 21S, R. 24E,  
Grand County, Utah Aug. 77 thru' May 78

Well No. Broadhead Federal #3  
Sec. 6, T. 21S, R. 24E,  
Grand County, Utah - Aug. 77 thru' May 78

Well No. Tomlinson Fee #2  
Sec. 12, T. 21S, R. 24E,  
Grand County, Utah - Feb. 78 thru' May 78

September 26, 1978

MEMO TO FILE

Re: Walter Broadhead  
Reina Well  
Sec. 14, T. 20S, R. 24E  
Grand County, Utah

Walter Broadhead was given permission to plug and abandon this well. T.D. is approximately 950'.

A 100' plug will be placed from 930' to 830' and a 100' plug will be set from 430' to 330', and a 50' plug will be set half in and half out of the surface casing. A 20' plug to surface will be set and a regulation dry-hole marker will be erected.

PATRICK L. DRISCOLL  
CHIEF PETROLEUM ENGINEER  
DIVISION OF OIL, GAS, & MINING

PLD/lw  
cc: U.S. Geological Survey



SCOTT M. MATHESON  
Governor

OIL, GAS, AND MINING BOARD

GORDON E. HARMSTON  
*Executive Director,*  
NATURAL RESOURCES

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES

I. DANIEL STEWART  
*Chairman*

CLEON B. FEIGHT  
*Director*

DIVISION OF OIL, GAS, AND MINING

CHARLES R. HENDERSON  
JOHN L. BELL  
THADIS W. BOX  
C. RAY JUVELIN

1588 West North Temple  
Salt Lake City, Utah 84116  
(801) 533-5771

May 25, 1979

Walter D. Broadhead  
1645 N. 7th Street  
Grand Junction, Colorado 81501

Re: Well No. Federal Reina #1  
Sec. 14, T. 20S, R. 24E  
Grand County, Utah

Well No. Patsantaras #1  
Sec. 7, T. 20S, R. 24E  
Grand County, Utah  
SECOND REQUEST

Gentlemen:

This letter is to advise you that the Well Completion or Recompletion Report and Log for the above referred to well is due and has not been filed with this office as required by our rules and regulations.

Please complete the enclosed Form OGC-3, in duplicate, and forward them to this office as soon as possible.

Thank you for your cooperation relative to the above.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

KATHY OSTLER  
RECORDS CLERK



SCOTT M. MATHESON  
Governor

GORDON E. HARMSTON  
*Executive Director,*  
NATURAL RESOURCES

CLEON B. FEIGHT  
*Director*

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING  
1588 West North Temple  
Salt Lake City, Utah 84116  
(801) 533-5771  
November 15, 1979

OIL, GAS, AND MINING BOARD

CHARLES R. HENDERSON  
*Chairman*

JOHN L. BELL  
C. RAY JUVELIN  
THADIS W. BOX  
CONSTANCE K. LUNDBERG  
EDWARD T. BECK  
E. STEELE McINTYRE

Walter D. Broadhead  
1645 N. 7th Street  
Grand Junction, Colo.  
81501

RE: SEE ATTACHED SHEET FOR  
WELLS DUE.  
THIS IS THE THIRD NOTICE ON ALL 3.

Gentlemen:

This letter is to advise you that the Well Completion or Recompletion Report and Log for the above referred to well is due and has not been filed with this office as required by our rules and regulations.

Please complete the enclosed Form OGC-3, in duplicate, and forward them to this office as soon as possible.

Thank you for your cooperation relative to the above.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

*Debbie Beauregard*  
DEBBIE BEAUREGARD  
CLERK-TYPIST

ATTACHMENT: WELLS DUE

- 1) Well No. Federal Reina #1  
Sec. 14, T. 20S, R. 24E,  
Grand County, Utah
- 2) Well No. Patsantaras #1  
Sec. 7, T. 20S. R. 24E,  
Grand County, Utah
- 3) Ari.-Mex Federal Sussex #1  
Sec. 22, T. 20S, R. 24E,  
Grand County, Utah

March 5, 1980

Walter D. Broadhead  
1645 N. 7th St.  
Grand Junction, Colorado 81501

Re: See enclosed copy of wells

Gentlemen:

This letter is to advise you that the Well Completion or Recompletion Report and Log for the above mentioned wells is due and has not been filed with this office as required by our rules and regulations.

Please complete the enclosed Form OGC-3, in duplicate, and forward them to this office as soon as possible.

Thank you for your cooperation relative to the above.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

CLEON B. FEIGHT  
DIRECTOR

- (1) Well No. Patsantaras #1  
Sec. 7, T. 20S, R. 24E.  
Grand County, Utah
- (2) Well No. Ari-Mex Fed. Sussex #1  
Sec. 22, T. 20S, R. 24E.  
Grand County, Utah
- (3) Well No. Fed. Reina #1  
Sec. 14, T. 20S, R. 24E.  
Grand County, Utah

ORAL APPROVAL TO PLUG AND ABANDON WELL

Operator Walter Broadhead Representative himself

Well No. Fed Reina #1 Located NENWSW Sec. 14 Twp 20S Range 24E 900' fwi

Lease No. U-15054 Field Sage Grand Co. State Utah 2390 fwi

Unit Name and Required Depth N/A Base of fresh water sands None

T.D. 1075 Size hole and Fill Per Sack 6 1/8" 8.0/28" Mud Weight and Top 10.0 #/gal. full

Casing Size	Set At	Top of Cement	To Be Pulled	Plugging Requirements		
				From	To	Sacks Cement
<u>7"</u>	<u>100'</u>	<u>etc</u>		<u>830</u>	<u>930</u>	<u>15 SX</u>
				<u>330</u>	<u>430</u>	<u>15 SX</u>
				<u>50'</u>	<u>150'</u>	<u>20 SX</u>
<u>Formation</u>	<u>Top</u>	<u>Base</u>	<u>Shows</u>			
<u>Cedar Mt</u>	<u>380'</u>	<u>20' sand to 400'</u>	<u>surface w/ marker</u>			<u>10 SX</u>
<u>Breckley Basin</u>	<u>880'</u>	<u>10' sand to 890'</u>				
<u>T.D</u>	<u>1075</u>					
<u>Mancos</u>	<u>Sur</u>					

**RECEIVED**  
MAY 7 1980

DIVISION OF  
OIL, GAS & MINING

Remarks

DST's, lost circulation zones, water zones, etc. No Logs - No DST  
No Cores 1) Fill in all holes, rehole, manhole, cellar, burn pit etc  
 2) Pick up all trash, debris & materials - remove from site  
 3) Re-seal pit - 1/2 full cuttings - no fluids - will fold in & level  
 recontour disturbed areas - 4) Rehab in accord w/ approved plan

Approved by Daniel J. Newquist Date 9-22-78 Time 9:30 Hole  
Photo

cc: Operator w/ Copy of Approval  
 BCM, Moak - Block Cont & Cond. of Approval  
 WLL File - this Copy  
 MER  
 Cse Summary Control Book

12

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

5. LEASE DESIGNATION AND SERIAL NO.

U-15054

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other \_\_\_\_\_

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

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Air-Mex

9. WELL NO.

Fed Reina #1

10. FIELD AND POOL, OR WILDCAT

Sage

11. SECT., R., M., OR BLOCK AND SURVEY OR AREA

Sec 14, T20S, R24E, S2M

2. NAME OF OPERATOR

Walter D Broadhead

3. ADDRESS OF OPERATOR

1645 N 7th Grand Junction Colorado

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

At surface 900' FWL 2340' FS L OF Sec 14

At top prod. interval reported below T20S R24E NW SW

At total depth

14. PERMIT NO. 43-019-30374 DATE ISSUED 6-29-77

12. COUNTY OR PARISH

Grand

13. STATE

Utah

15. DATE SPUNDED 7-20-78 16. DATE T.D. REACHED 9-21-78 17. DATE COMPL. (Ready to prod.) 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* 4495 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD 1675 21. PLUG, BACK T.D., MD & TVD TD to Surface 22. IF MULTIPLE COMPL., HOW MANY\* 23. INTERVALS DRILLED BY Rotary

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\* 25. WAS DIRECTIONAL SURVEY MADE NO

26. TYPE ELECTRIC AND OTHER LOGS RUN NONE 27. WAS WELL CORRED NO

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
7"	17.6	100'	8 3/4	circulated to surface	NONE

29. LINER RECORD				30. TUBING RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (Interval, size and number)	32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
	DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33.\* PRODUCTION DATE FIRST PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) WELL STATUS (Producing or shut-in)

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

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

35. LIST OF ATTACHMENTS

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

SIGNED Walter D Broadhead TITLE operator DATE 10-17-80

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

# INSTRUCTIONS

**General:** This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 36.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

**Item 18:** Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. **Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

**Item 29:** "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool. **Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

OIL, GAS & MINING  
DIVISION OF

OCT 21 1980

37. SUMMARY OF POROUS ZONES GIVE ALL IMPORTANT ZONES ON USED, TIME TOOL OPEN, FLOWING AND RECOVERIES	BOTTOM	DESCRIPTION, CONTENTS, ETC.	TOP	38. GEOLOGIC MARKERS
			MEAS. DEPTH	TRUB VERT. DEPTH
Cedar Mt	400'	20' Sand No Shows	380'	Cedar Mt
Brucy Basin 880'	890'	10' Sand " " 10 lb Mud in hole Plugged 830' 930 with 15 SX 330' 430 " 15 SX 50' 150 " 20 SX Surface Marker 10 SX No water shows	to 400' 880' to 890'	Brucy Basin 880' to 890'