

FILE NOTATIONS

Entered in MID File ✓
Location Map Pinned ✓
Card Indexed ✓

Checked by Chief
Approval Letter
Disapproval Letter

COMPLETION DATA:

Date Well Completed *12-5-79*

Oil ✓ WW TA
..... OS PA

Location Inspected
Bond released
State or Fee Land

LOGS FILED

Driller's Log ✓
Electric Logs (No.) ✓
E I Dual I Lat **GR-N** Micro
BHC Sonic GR Lat **MI-L** Sonic
CBLog CCLog Others

William W. Whitley
1705 Colorado State Bank Building
1600 Broadway
Denver - Colorado - 80202
phone (303) 861-2469

July 4, 1979



State of Utah
Division of Oil, Gas & Mining
1588 West, North Temple
Salt Lake City, UT 84116

RE: #1-24 Federal (U-42474)
SW $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 24, T40S-R22E
San Juan County, Utah

#1-18 Federal
SW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 18, T40S-R23E
San Juan County, Utah

Gentlemen:

Attached is a copy of my Application for Permit to Drill the two subject wells in San Juan County, Utah, for your files.

If you have any questions or need further information, please advise.

Sincerely,

W W Whitley / KM
William W. Whitley

WWW:km

Attachments

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

5. LEASE DESIGNATION AND SERIAL NO.
U-42474

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Federal

9. WELL NO.
1-24

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
24 - T40S-R22E

12. COUNTY OR PARISH
San Juan

18. STATE
Utah

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
WILLIAM W. WHITLEY

3. ADDRESS OF OPERATOR
1600 Broadway, No. 1705, Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
At surface SW $\frac{1}{4}$ SE $\frac{1}{4}$ (620' FSL, 1930' FEL)
At proposed prod. zone Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
7 Miles East of Bluff, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any)
620'

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
3000'

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
Gr. 4457'

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 $\frac{1}{2}$ "	13-3/8"	32.75 lb.	200'	175 sx.
12-3/4"	8-5/8"	24.00 lb.	850'	3x.
7-7/8"	5 $\frac{1}{2}$ "	14 & 15.5 lb.	5680'	150 sx.
-OR-				
7-7/8"	4 $\frac{1}{2}$ "	10.5 lb.	5680'	150 sx.

- The well will be spudded in the Morrison Formation.
- The estimated tops of important geological formations are as follows:

Entrade	325'	Moen Kopi	2100'
Carmel	375'	Cutler	2335'
Navajo	425'	Hermosa	4315'
Kaventa	830'	Ismay	5223'
Wingate	890'	Lower Ismay	5344'
Chinle	1238'	Desert Creek	5444'
Shinarump	2085'	Total Depth	5600'

(Continued)

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. ORIGINAL SIGNED BY
SIGNED B. P. McCourt TITLE Petroleum Engineer DATE June 29, 1979

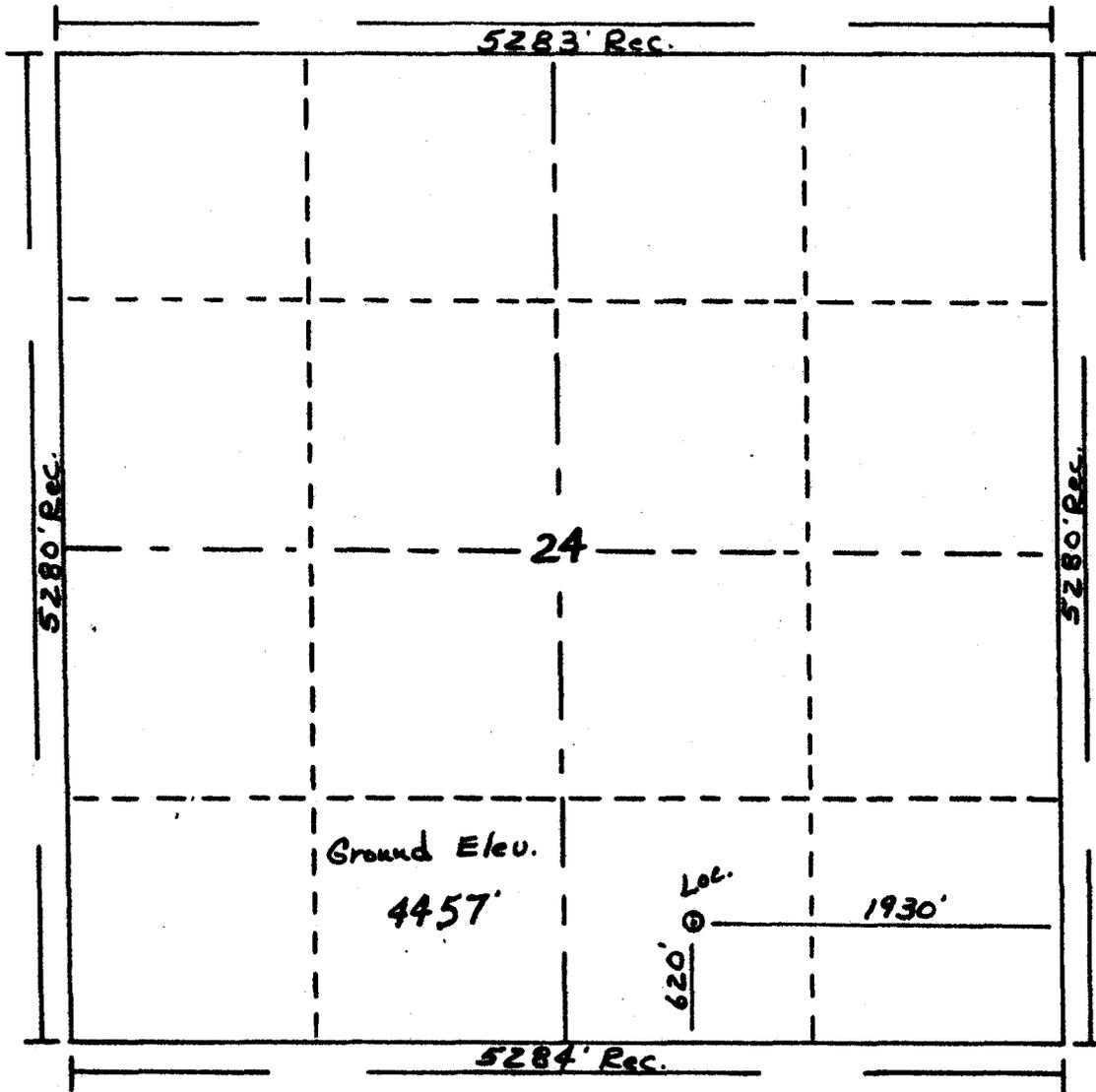
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

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



R. 22 E.



T. 40 S.

Scale... 1" = 1000'

Powers Elevation Company, Inc. of Denver, Colorado has in accordance with a request from Don McCourt for William W. Whitley determined the location of to be 620' FSL + 1930' FEL Section 24 Township 40 S. Range 22 E. Salt Lake Meridian San Juan County, Utah

WILLIAM W. WHITLEY
1-24 Federal

I hereby certify that this plat is an accurate representation of a correct survey showing the location of

Date: 6-2-79

J. Johnson
Licensed Land Surveyor No. 2711
State of Utah

3. Proposed Casing Programs:

- A. Surface Casing: 200', 13-3/8", 32.75 lb., K-55, 8 rd.th., ST&C New casing.
- B. Intermediate Casing: If water flow is encountered in Navajo Sand, approximately 850' of 8-5/8", 24 lb., K-55, ST&C, 8 rd.th., New casing would be run and cemented to surface.
- C. Production Casing: 5 1/2", 14 lb., and 15.5 lb., K-55, ST&C, 8 rd.th., New casing or 4 1/2", 10.5 lb., K-55, LT&C, 8 rd.th., New casing

4. Estimated depths of anticipated water, oil or gas zones:

- A. Navajo Sand 425' (Fresh Water)
- B. Lower Ismay 5344' (Oil)
- C. Desert Creek 5444' (Oil)

- 5. The casinghead will be a flanged 13-3/8" x 10", 900 Series, 3000 psi working pressure type. The blowout preventer will be a 10", 900 Series, 3000 psi working pressure with 4 1/2" pipe rams and blind rams with a remote hydraulic closing unit. The blowout preventer arrangement will include a kill line and choke manifold as shown in Exhibit "F" in the schematic diagram. The BOP will be tested to 1000 psi prior to drilling out the cement plug in the surface casing and once each tour.
- 6. Clear water with drilling detergent will be used for a circulating medium to about 5000' depth. The well will then be mudded up properly before drilling the Ismay formation. The mud will be a fresh water gel chemical type mud. The mud weight will be maintained at about 9.5 lbs./gal., viscosity 35 to 45 sec./qt., and water loss 6 to 8 cc.
- 7. The following auxillary drilling equipment will be utilized or available:
 - A. Kelly cock
 - B. Float valve above bit
 - C. A 3,000-psi W.P. full opening valve will be screwed into a 4 1/2" drillpipe sub to be used as a stabbing valve.
 - D. No mud monitoring equipment will be used.
- 8. No cores are planned on this well. Any Lower Ismay and Desert Creek porosity with oil shows will be drillstem tested. An Induction Electric log will be run from total depth to the base of any casing. A Borehole Compensated Sonic - Gamma Ray Caliper log will be run over any indicated porosity zones with oil shows.
- 9. No abnormal pressures or temperatures are encountered in the immediate area. The pressure gradient in the Lower Ismay and Desert Creek porosity zones are about 0.388 psi/ft. depth. No hydrogen sulfide has been encountered in the Ismay, Desert Creek or shallower zones in this area.
- 10. The perforations in either the Ismay or Desert Creek formations will be acidized unless an adequate flow of hydrocarbons into the wellbore is obtained by perforating only. The acid treatments should not be over 500 gallons of acid per foot of perforations. Normal treating pressures are anticipated. If flammable liquids are

used to treat the well, the pumping equipment will be at least 120 feet from the wellhead and the pumping equipment at least 120 feet from the storage tanks.

11. It is planned to spud this well in the last half of July or August.

R 22E

R 23E

1400' 10' 10'

14

15

18

●
*1-13

●
15 22

○
*1-10

T
40
S

1400' 10' 10'

23

1400' 10' 10'

24

19

1400' 10' 10'

1400' 10' 10'

STANLEY W/O

STANLEY W/O
22 000'

●
*1-24

W RIVER

26

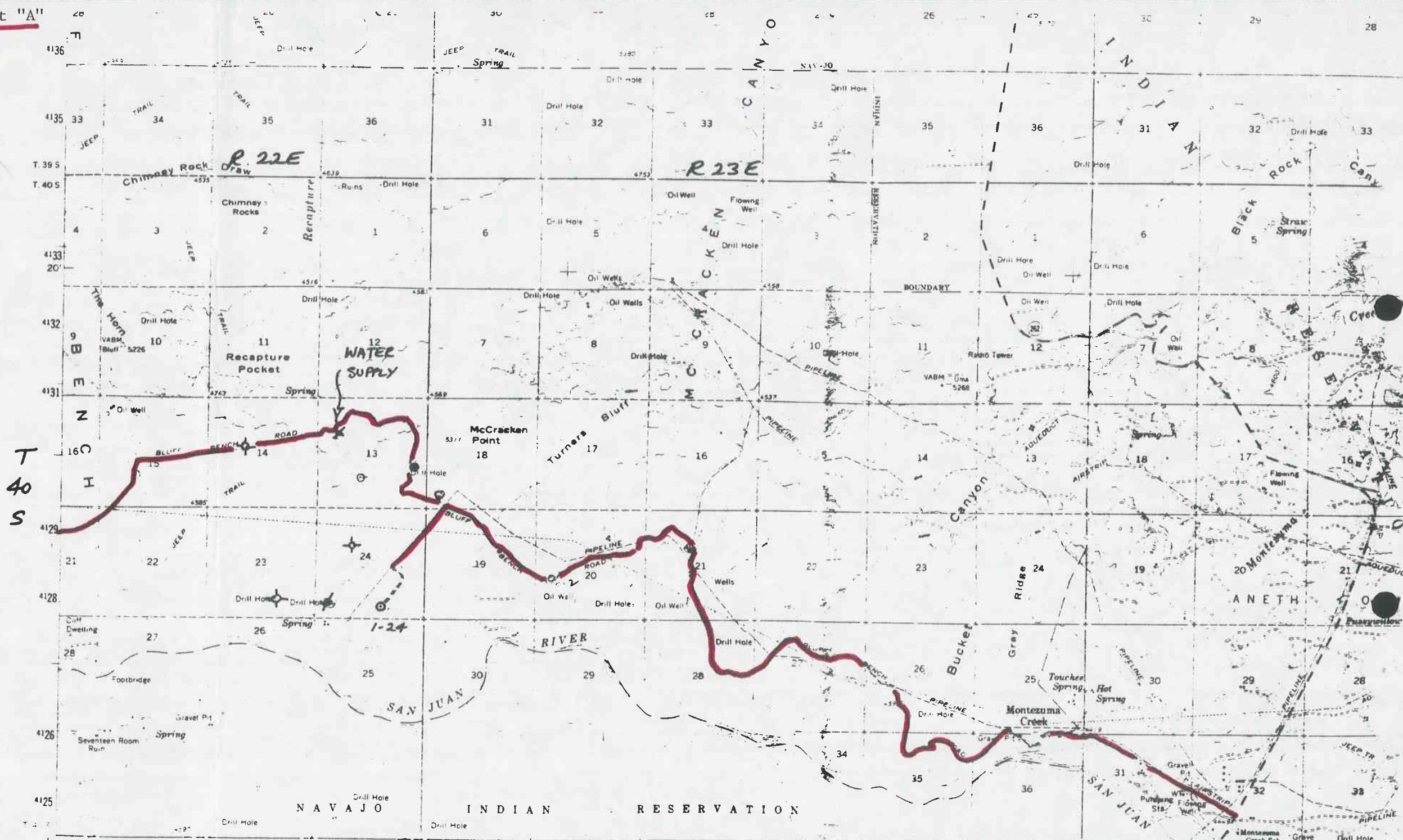
25

30

LEGEND

- Well Location
- Producing Oil Well
- Abandoned Oil Well
- ◇ Dry Hole

SCALE: 1" = 2000'



T
40
S

WILLIAM W. WHITLEY
 #1-24 Federal
 NE SW Section 24, T-40S, R-22E L E C O M E S A

220.00
 FEE
 37.15

William W. Mitley

EXHIBIT D



743 FSL + 513 FWL
Sec. 18, T-40-S, R-23-E
POWERS ELEVATION COMPANY, INC.

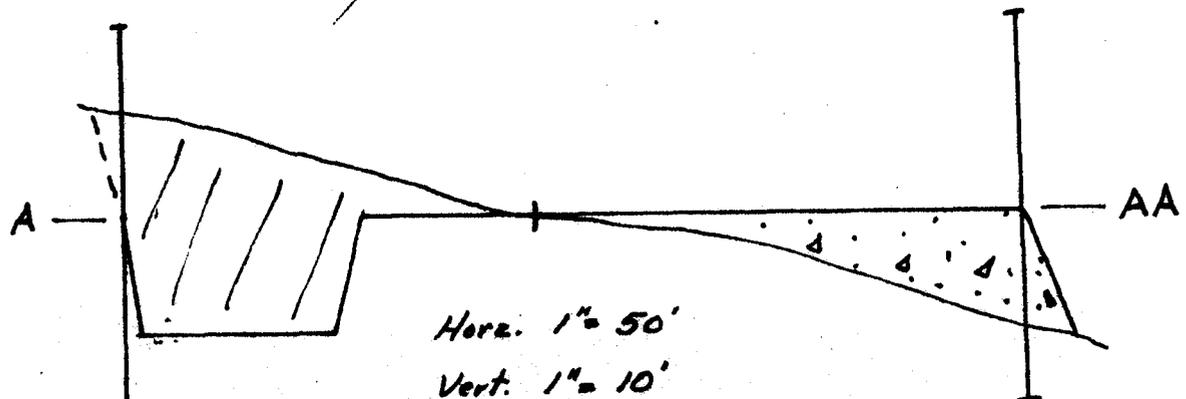
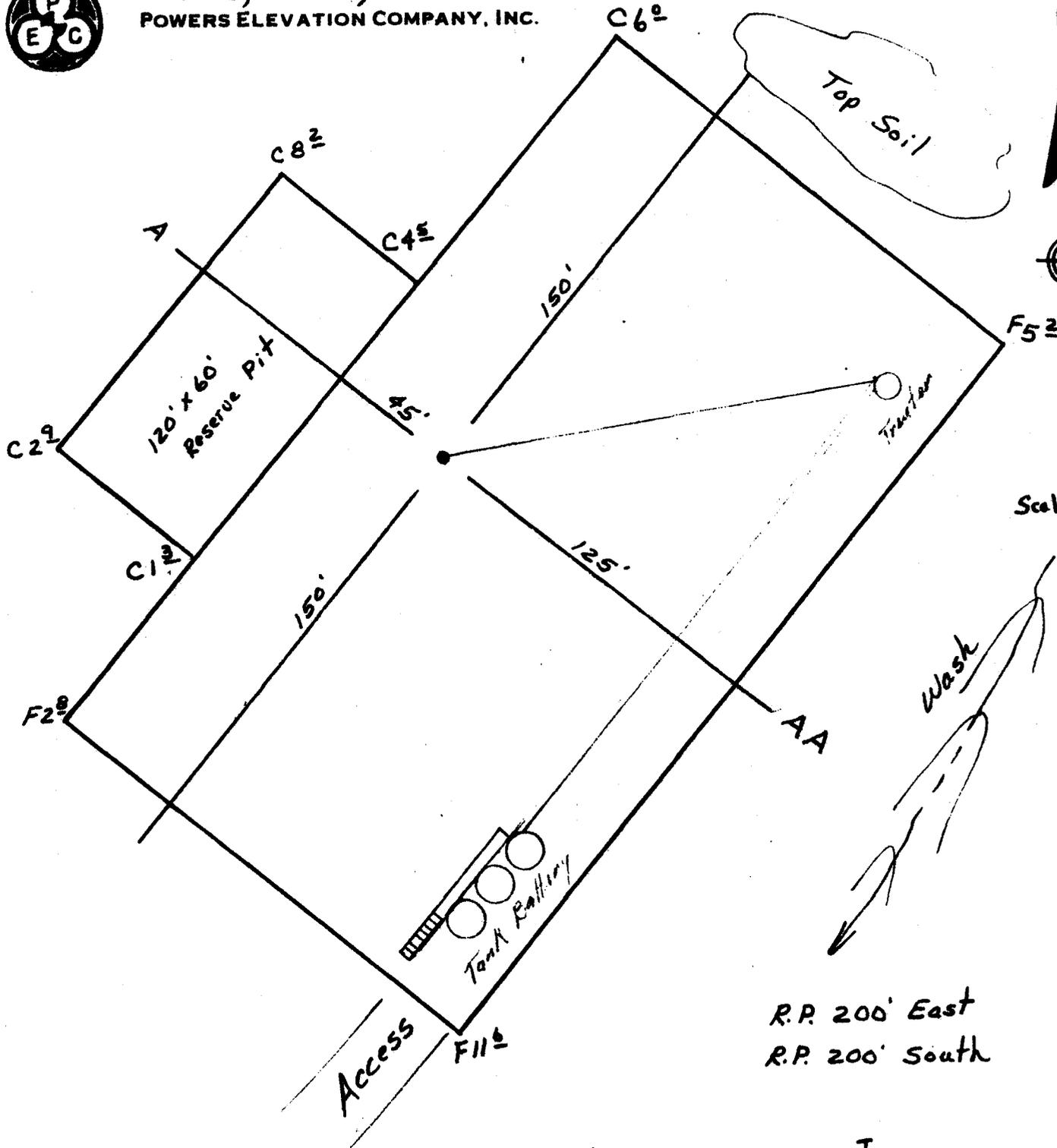
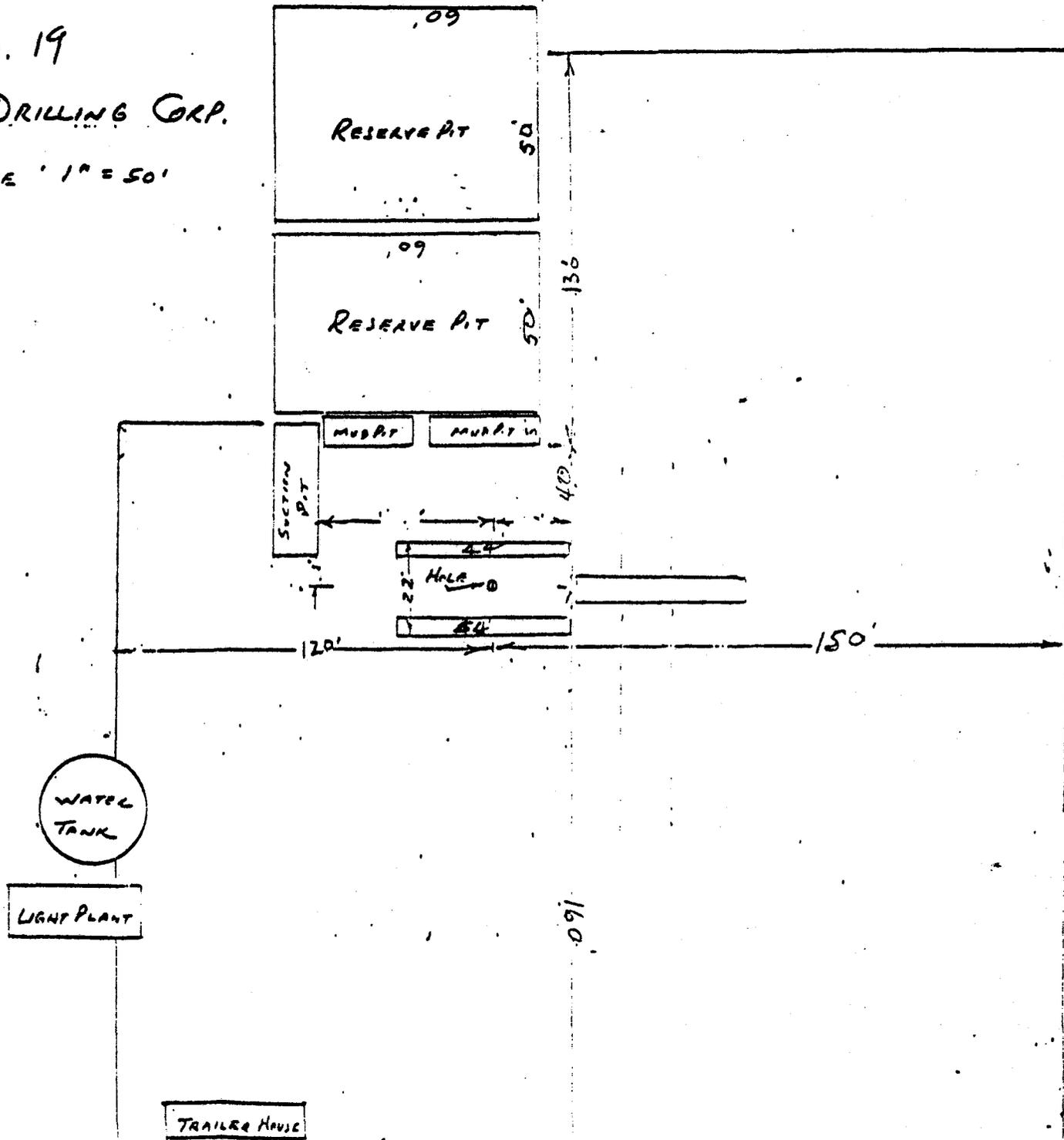


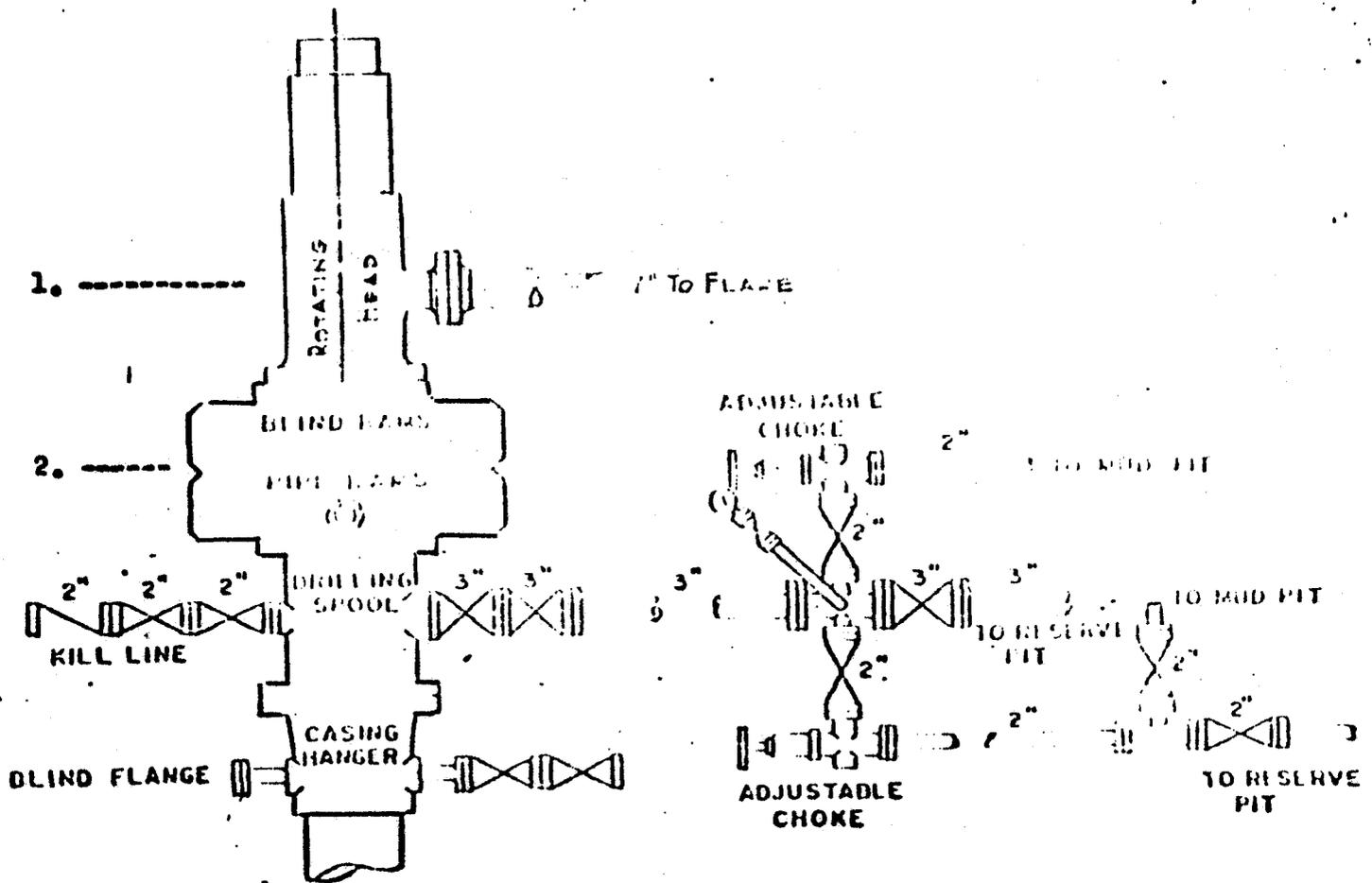
Exhibit E

RIG No. 19

CACTUS DRILLING CORP.

APPROX SCALE 1" = 50'





1. Shaffer Type 51 Rotating Head

2. Shaffer 12" 900 Series Type 48 Double Hydraulic

STATE OF UTAH
DIVISION OF OIL, GAS, AND MINING

** FILE NOTATIONS **

Date: July 9, 1979

Operator: William W. Whitley

Well No: Federal 1-24

Location: Sec. 24 T. 40S R. 22E County: San Juan

File Prepared:

Entered on N.I.D.:

Card Indexed:

Completion Sheet:

API Number: 43-037-30493

CHECKED BY:

Administrative Assistant: M.A.J. Minder 7-12-79

Remarks:

Petroleum Engineer: [Signature]

Remarks:

Director: _____

Remarks:

1
INCLUDE WITHIN APPROVAL LETTER:

Bond Required:

Survey Plat Required:

Order No. _____

Surface Casing Change
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

ltm

Feed USGS

July 13, 1979

William W. Whitley
1705 Colorado State Bank Building
1600 Broadway
Denver, Colorado 80202

Re: William W. Whitley
Well No. Federal 1-24
Sec. 24, T. 40S, R. 22E,
San Juan County, Utah

Dear Sir:

Insofar as this office is concerned, approval to drill the above referred to well is hereby granted in accordance with Rule C-3, General Rules and Regulations and Rules of Practice and Procedure.

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

MICHAEL T. MINDER - Geological Engineer
Home: 876-3001
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. Your cooperation in completing this form will be appreciated.

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

The RPI number assigned to this well is 43-037-30493.

Sincerely,

DIVISION OF OIL, GAS AND MINING

Michael T. Minder
Geological Engineer

/btm
cc

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

NAME OF COMPANY: William W. Whitley

WELL NAME: Federal 1-24

SECTION 24 SW SE TOWNSHIP 40S RANGE 22E COUNTY San Juan

DRILLING CONTRACTOR William W. Whitley

RIG # 4

SPUDDED: DATE Sept 14, 1979

TIME 3:00 p.m.

HOW rotary

DRILLING WILL COMMENCE presently

REPORTED BY William W. Whitley

TELEPHONE # _____

DATE September 17, 1979

SIGNED M. G. Munder

CC: USGS

JH

DAILY REPORT

No. 1-24 Federal
TURNER BLUFF PROSPECT

Location SW $\frac{1}{4}$ SE $\frac{1}{4}$ 24-40S-22E, San Juan County, Utah
Proposed T.D. 5600'
Operator William W. Whitley
Contractor Cactus Drilling Corporation
Elevation 4457' G.L.

- 9-15-79 Depth 201', Drilling. 201' drilled last 24 hrs.
SPUDDED WELL 8:00 A.M. 9-14-79. Formation sand & shale.
MW 9.0, Vis. 50. Bit No. 1: 17 $\frac{1}{2}$ " HTC OSC-3, Used, 0-201'.
80 RPM, PP 400, 58 SPM, Liner 5 $\frac{1}{2}$ " x 16".
Time: Drilling 15 hrs., rig serv. 1/4 hr., drill mouse & rathole
8-3/4 hrs.
- 9-16-79 Depth 238', tripping w/ Bit #2. Bit No. 2: 8-3/4", Smith DG, New,
201-238' in 3 hrs. Dev. $\frac{1}{4}$ ^o @ 238'. Ran 6 jts., 253', 13-3/8",
48.0 lb., K-55, 8 rd.th., R-3 New casing; cem. @ 214' K.B. w/
235 sx. reg. w/ 1/4 lb. Flocele per sk. & 3% CaCl₂. Circ. out
72 sx. cement. PD 2:30 P.M. 9-15-79.
Time: Drilling 3 hrs., tripping 2 $\frac{1}{4}$ hrs., rig serv. 1/4 hr.,
WOC 6 hrs., RU & run 13-3/8" surface csg. 3 hrs., RU & cem. 13 hrs.,
nipple up 6 $\frac{1}{2}$ hrs.
- 9-17-79 Depth 963', Reaming 11" hole @ 558'. Bit #2: 8-3/4" Smith DG,
New, 725' in 11 hrs.; Bit #3: 11" Smith DT, Used, in @ 963'.
Encountered 6" water flow in Navajo Sand, Reaming 11" hole to
963' to run 8-5/8" csg. Dev. 3/4^o @ 930'.
WOB 15,000#, 60 RPM, 1,000 PP, D-550 Emsco Liner - 5 $\frac{1}{2}$ " x 16".
Time: Drilling 11 hrs., tripping 2-1/4 hrs., rig serv. 1/2 hr.,
Reaming 4 hrs., NU 3 hrs., repair head 3 $\frac{1}{2}$ hrs.
- 9-18-79 Depth 968', reaming 11" hole @ 630'. Bit #4: 11" Smith DJG,
Used. WOB 10,000#, 45 RPM. PP 500, 58 SPM, Liner 5 $\frac{1}{2}$ " x 16".
Reamed 238' to 968' w/ 9-7/8" bit. Reamed 238' to 630' w/
11" bit. Dev. 3/4^o @ 930'.
Time: Tripping 2 hrs., WOC 7-3/4 hrs., Reaming 9 $\frac{1}{2}$ hrs., RU &
run csg. & lay down csg. 1-3/4 hrs.
- 9-19-79 Depth 968', nipping up. Ran 26 jts., 956', of 8-5/8", 24#,
J-55, R-2&3, 8 rd.th., New Intermediate casing. Cem. @ 953' K.B.
w/ 200 sx. reg. w/ 2% CaCl₂ & $\frac{1}{2}$ # Flocele/sk. Good returns
while cementing. Bumped plug w/ 1300 psi. Held for 5 min., OK.
Released pressure & float held.
Time: Tripping 3/4 hr., Rig service 1/4 hr., Reaming 10-3/4 hrs.,
RU & run casing, WOC & Nipple up 8 $\frac{1}{2}$ hrs.





william w. whitley
1705 colorado state bank building
1600 broadway
denver · colorado · 80202
phone (303) 861-2469

November 28, 1979

State of Utah
Department of Natural Resources
Division of Oil, Gas & Mining
1588 West North Temple
Salt Lake City, Utah 84116

RE: WILLIAM W. WHITLEY #1-24 Federal
SW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 24, T40S-R23E
San Juan County, Utah **22E**

Gentlemen:

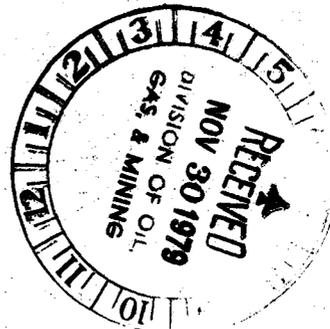
Enclosed in quadruplicate please find the Report of water encountered during drilling.

Very truly yours,

William W. Whitley

WWW:ts

Enclosure



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

U-42474

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Federal

9. WELL NO.

1-24

10. FIELD AND POOL, OR WILDCAT

Wildcat

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

Sec. 24- T40S-R22E

14. PERMIT NO.

43-037-30493

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

4457' GR, 4469' KB

12. COUNTY OR PARISH 13. STATE

San Juan Utah

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

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

Casing Detail & Cementing

(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.)*

Listed below is the casing detail and cementing information for the 1-24 Federal:

Size	Weight	Grade	Thread	New/Used	Depth Set	Cementing Information
13 3/8"	48	K-55	8"/th ST&C	New	204' K.B.	200 sx Class B w/2% CaCl ₂
8 5/8"	24	K-55	8"/th ST&C	New	953' K.B.	200 sx Class B w/2% CaCl ₂
4 1/2"	10.5	K-55	8"/th LT&C	New	5582' K.B.	200 sx 50-50 Pozmix w/2% Gel & 10% NaCl
2 3/8"	4.7	K-55	8"/th EUE	Used	5409' K.B.	

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

SIGNED Robert W. Peterson TITLE Petroleum Engineer DATE 1/7/80

(This space for Federal or State office use)

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

WILLIAM W. WHITLEY

#1- 24 FEDERAL
SW $\frac{1}{4}$ SE $\frac{1}{4}$ (620' FSL & 1930' FEL)-Sec. 24, T40S-R22E
San Juan County, Utah

NTL-6 MULTIPOINT REQUIREMENTS

SURFACE USE PLAN

1. Existing Roads

- A. portion of a U.S. Geological Survey Survey map is attached as Exhibit "A" showing existing roads.
- A. The location plat is attached as Exhibit "B" which shows the location as staked. The well will be drilled in the (620' FSL and 1930' FEL) of Section 24, Township 40 South, Range 22 East, San Juan County, Utah.
- B. The location is 11.0 miles from Utah State Highway 262 which is paved. The 11.0 miles is on an existing oil field road (Bluff Bench Road) which is used for access to Recapture Creek oil field. The road is shown on the map (Exhibit "A") in blue. The road starts at Montezuma Creek and continues west and connects again with Utah Highway 163 about one mile southeast of Bluff, Utah. Existing road is a pipeline road for last 0.6 mile.
- C. The access road from the existing oil field road is shown in red on Exhibit "A". This access is 0.5 mile long.
- D. All existing roads within a one-mile radius are shown on the attached Exhibit "A".
- E. No improvements are planned for the existing oil field road. As the surface is very sandy, the road should not need any maintenance.

2. Planned Access Road

- A. The planned access road will be 0.5 mile long. For drilling the well the surface will need to be bladed. If the well is successful, a road will be bladed 20 feet wide and approximately one foot above the present level.

- B. The maximum grade will be approximately three percent.
- C. No turnouts will be necessary.
- D. No drainage will be necessary other than the barrow pits created by blading the road if the well is successful.
- E. No culverts or major cuts or fills will be necessary.
- F. No road surfacing materials will be required.
- G. No gates, cattleguards, or fence cuts will be required.
- H. The center line of the road has been flagged

3. Location of Existing wells (Exhibit "C")

For all existing wells within a one-mile radius of this well.

- A. There are no water wells within a one-mile radius of this location.
- B. There are two plugged and abandoned wells within a one-mile radius of this location, located in the SE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 24, and in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 23, T40S-R22E, San Juan County.
- C. There is one temporarily abandoned well within a one-mile radius of this well located in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 24.
- D. There are no disposal wells within a one-mile radius of this well.
- E. There are no wells presently being drilled within a one-mile radius of this proposed location.
- F. There are no producing wells located within a one-mile radius of this proposed well.
- G. There are no shut-in wells located within a one-mile radius of this proposed location.
- H. There are no injection wells located within a one-mile radius of this proposed location.
- I. There are no monitoring or observation wells for other uses located within a one-mile radius of this proposed location.

4. Location of Existing and/or Proposed Facilities

- A. Within a one-mile radius of location the following existing facilities are owned or controlled by lessee/operator:
- 1) Tank Batteries: None
 - 2) Production Facilities: None
 - 3) Oil Gathering Lines: None
 - 4) Gas Gathering Lines: None
 - 5) Injection Lines: None
 - 6) Disposal Lines: None
- B. If production is obtained, new facilities will be as follows:
A pumping unit, engine, heater treater, separator, flowline and tank battery will be required; the tank battery will be located on the drilling pad.
- 1) The tank battery will consist of two or three 400-barrel welded tanks as shown on Exhibit "D" and a 4' x 20' or 6' x 20' vertical treater. The treater will be located at least 150 feet from the wellhead and the stock tanks will be located at least 150 feet from the wellhead and the treater.
 - 2) Exhibit "D" shows the location and dimensions of the proposed facilities.
 - 3) The oil and gas flow lines will be 3" fiberglass or steel lines wrapped with a plastic protective coating buried 5 feet deep. The circulating line will be 2" diameter steel line also buried. When the pumping unit is installed, it will be installed on a gravel pad with a wide base.
 - 4) The production pit will be fenced. If the well produces over 5 BWPD, the production pit will be lined and flagged unless the water is fresh. The pumping unit will have guard rails installed around the crank weights and belt guards will be installed over the V-belts from the engine to the pumping unit. A siphon pit will be installed ahead of the water disposal pit.
- C. Plan for Rehabilitation of Disturbed Areas no longer needed for Operations:
- The reserve pit will be backfilled and recontoured to the original contour as close as practical and the topsoil replaced. If the well is plugged and abandoned, the location will be leveled and the topsoil replaced. All foreign material will be buried in the reserve pit.

The topsoil will be reseeded in a native grass seed mixture recommended by the Bureau of Land Management. The reseeded will be done at the appropriate time of year so that seeds will germinate properly. The same procedure will be followed for the location pad and access road if the well is plugged and abandoned.

5. Location and Type of Water Supply

The drilling water will be hauled by truck Recapture Creek at a road crossing approximately in the center of the NW $\frac{1}{4}$ Section 13, T40S-R22E. (See Exhibit "A").

6. Source of Construction Materials

No construction materials will be needed.

7. Method of Handling Waste Disposal

- A. Cuttings: Drill cuttings will be contained in the reserve pit.
- B. Drilling fluids: Drilling fluids will be contained in steel mud tanks and the reserve pit. The reserve pit will be fenced if it cannot be backfilled immediately after the well is drilled.
- C. Any produced oil will be contained in steel swab or test tanks. Produced water, if any, will be contained in the production pit after the well is completed and in swab tanks or the reserve pit until the well is completed and the battery installed.
- D. Sewage will be disposed in the reserve pit or sanitary holes.
- E. Garbage and waste material will be contained in the trash pit. The trash pit will be fenced with a mesh fence.
- F. The wellsite will be policed of all foreign material after the drilling and completion rigs are moved off. All trash will be burned or buried. The reserve pit will be backfilled and reseeded.

8. Ancillary Facilities

Not Applicable.

9. Wellsite Layout

- A. See attached Exhibit "D" for cuts and fills in the drillsite location.
- B. The layout of the rig is shown on Exhibit "E".
- C. The rig orientation, parking areas and entrance of access road are shown on Exhibit "E".
- D. The reserve pit will not be lined. The water disposal pit will be lined if the well produces over 5 BWPD.

- E. The location of the production facilities is shown on Exhibit "D" attached.

10. Plans for Restoration of Surface

- A. The reserve pit will be backfilled and recontoured to the original contour as closely as practical and the topsoil replaced. The location will be leveled and topsoil replaced. All foreign material will be buried in the reserve pit.
- B. The topsoil will be replaced and reseeded to native grasses according to the BLM's specifications on all the unused portions of the location and all of the reserve pit. In case of a dryhole the road will be reseeded unless the surface owner wishes to use it.
- C. The reserve pit will be fenced as soon as the rig is moved off and until it is backfilled. The reserve pit will be backfilled as soon as it dries up enough.
- D. If any oil is left on the reserve pit, it will be removed or the pit flagged.
- E. The reserve pit will be backfilled just as soon as it dries up enough and the weather permits. The location will be leveled as soon as the rig moves off if the well is plugged and abandoned or after production operations are suspended if the well is a producer. The topsoil will be replaced and the location will be reseeded when the weather is right after the location is restored.
- F. The well is planned to be drilled in the last half of July or early August. The rehabilitation operations should be completed by early fall.

11. Other Information

- A. The topography in the general area is rough although this location and access road is good. The soil is very sandy and should be easy to doze and should not cause any problems even in prolonged wet weather. The surface of this location is about 50 percent bare, about 5 percent sagebrush, 23 percent Mormon Tea and 20 percent native grass and 2 percent yucca. The location will be difficult to build and it will require dozing fill from the southeast side of the location onto bare sandstone. Well will be spudded in Morrison Formation.
- B. The surface is very arid and the only thing the land could be used for is sheep grazing. The surface is owned by the Federal Government.
- C. No occupied buildings, historical sites, cultural sites or archeological sites are evident from inspecting this location or the access roads.

12. Lessee's or Operator's Representative

The Operator's field representative who will be responsible for compliance with the Surface Use and Operations Plan is A. Vitali, Jr. Mr. Vitali can be reached by telephone, Area Code 303-233-2383.

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 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 William W. Whitley, and William W. Whitley's contractors and subcontractors in conformity with this plan and terms and conditions under which it is approved.

ORIGINAL SIGNED FOR
R. W. PETERSON

by Donald P. McCourt

Robert W. Peterson, Petroleum Engineer

Dated: June 27, 1979

RWP:km

Attachments

WILLIAM W. WHITLEY

#1-24 Federal
Section 24, T40S - R22E
San Juan County, Utah

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SUMMARY

WELL NAME: William W. Whitley
#1-24 Federal

WELL LOCATION: SW SE $\frac{1}{4}$ Section 24, T40S - R22E
(620' F.S.L. & 1930' F.E.L.)
San Juan County, Utah

TYPE: Wildcat

ELEVATION: 4457 feet - Ground
4469 feet - Kelly Bushing

TOTAL DEPTH: 5580 feet - Driller
5587 feet - Schlumberger

GEOLOGIST: Achille Vitali, Jr.
6670 West 28th Avenue
Denver, Colorado 80214

CONTRACTOR: Cactus Drilling Corporation
Farmington, New Mexico
Rig 20 - Brewster N-45
Pump #1 - Emsco D-550
Pump #2 - Emsco D-300
Pusher - Joe Vaughn

COMMENCED: Spudded - 12 Noon; September 14, 1979

COMPLETED: Finished Drilling - 7:45 PM; October 9, 1979
Logged with Schlumberger - October 10, 1979
Ran Drill Stem Test #3 - October 11, 1979
Ran Production Casing - October 11 & 12, 1979

CASING RECORD:

Surface Casing

Landed 5 joints of K-55, 48#, 13 3/8 inch casing at 204 feet kb. Cemented casing with 200 sacks of class 'B' cement containing 2% calcium chloride.

Intermediate Casing

Landed 26 joints of 24#, K-55, 8 5/8 inch casing at 953 feet kb. Cemented casing with 200 sacks of class 'B' cement containing 2% calcium chloride and 1/4# Flocele per sack.

Production Casing

Landed 152 joints of 10.5#, K-55, 4 1/2 inch casing at 5582 feet kb. Cemented casing with 200 sacks of 50/50 Pozmix cement containing 2% gel and 10% salt.

LOGGING RECORD:

Samples

Caught	600' - 960'
	4000' - 5580'
Described	600' - 960'
	4000' - 5580'

Drilling Time

Geolograph 200' - 5580'

Mechanical Logs

Schlumberger

Dual Induction - SFL Log 957' - 5581'

Compensated Neutron - Formation Density Log 4129' - 5587'

FORMATION TOPS

<u>FORMATION AND AGE</u>	<u>SAMPLE TOPS</u>	<u>LOG TOPS</u>	<u>DATUM</u>
<u>Jurassic</u>			
Morrison	Surface	Surface	+4457'
Entrada	- - -	- - -	- - -
Carmel	- - -	- - -	- - -
<u>Triassic</u>			
Navajo	+378'	- - -	- - -
Kayenta	+868'	- - -	- - -
Wingate	+945'	- - -	- - -
Chinle	- - -	1345'	+3124'
Shinarump	- - -	2105'	+2364'
Moenkopi	- - -	2150'	+2319'
<u>Permian</u>			
Cutler	- - -	2385'	+2085'
<u>Pensylvanian</u>			
Hermosa	4330'	4355'	+ 114'
Paradox	- - -	5078'	- 609'
Ismay	5240'	5258'	- 789'
Desert Creek	5470'	5470'	-1001'

DRILL STEM TESTS

Drill Stem Test #1 5270' to 5430' (160') Lower Ismay Zone

Halliburton Testers. Bottom Anchor. (Found 75 to 80 feet of mushy fill on bottom.) Tool opened with very weak blow (2 to 3 inches of water). Remained steady to end. Reopened tool with no blow. Remained dead for 20 minutes, then blew very weak bubbles for remainder of test.

Recovered: 115 feet drilling mud.

<u>Pressures</u>		<u>Time</u>
IHP	2742#	
IFP	10.9#(?)	10 minutes
ISIP	2088#	60 minutes
2nd FP	245#(?)	+60 minutes
FSIP	2088#	120 minutes
FHP	2742#	
Temperature	- -	

Sample Chamber Recovery:

Pressure: 0#

1700 cc heavy mud and cutting.

No Gas, Oil or water.

Drill Stem Test #2 5280' to 5430' (150') Lower Ismay Zone

Halliburton Testers. Bottom Anchor. Tool opened with very weak blow that increased to weak (3 to 4 inches of water). Reopened tool with very faint blow - few bubbles. Increased to weak at end (2 inches of water).

Recovered: 180 feet of drilling mud - no oil or gas or water.

<u>Pressures</u>		<u>Time</u>
IHP	2673#	
IFP	53/53#	10 minutes
ISIP	2029#	60 minutes
2nd FP	53/133#	60 minutes
FSIP	1975#	120 minutes
FHP	2592#	
Temperature	- -	

Sample Chamber Recovery:

Pressure: 0#

2000 cc drilling mud.

Drill Stem Test #3 5490' to 5580' (90') Desert Creek Zone

Halliburton Testers. Bottom Anchor. Tool opened with strong blow. Gas to surface in 8 minutes. Had 170# on 1/2 inch choke in 10 minutes = 1250 MCFG/D. Mud to surface in 12 to 13 minutes. Oil to surface in 14 to 15 minutes. Unloaded gas and oil all during the initial shut-in period. Reopened tool with very strong blow that stabilized to 175# on 1/2 inch choke in 20 minutes (=1250 MCFG/D). Remained steady to end. Had good spray of oil throughout. No water. Estimated 15⁺ barrels on pit after test.

Recovered: 894 feet dark green-brown oil.

<u>Pressures</u>		<u>Time</u>
IHP	2755#	
IFP	975/1187#	10 minutes
ISIP	2222#	60 minutes
2nd FP	1001/1611#	60 minutes
FSIP	2169#	180 minutes
FHP	2622#	

'Sample Chamber Recovery:

Pressure: 1075#

5.2 cubic feet gas.

1400 cc slightly paraffinic green-brown oil.

Gravity not available.

No water.

BIT RECORD

<u>NO</u>	<u>SIZE</u>	<u>MAKE</u>	<u>TYPE</u>	<u>DEPTH OUT</u>	<u>FEET</u>	<u>HOURS</u>	<u>PUMP PRESS.</u>
1	17 1/2	HTC	OX3A	225'	225'	18	300#
2	8 3/4	Smith	DG-J	963'	753'	11	1000#
3	9 3/4	Smith	DG-J(RR)	Ream			
4	11	Smith	DG-J	Ream			
5	7 7/8	Smith	DGTH-J	1626'	663'	12 1/2	1000#
6	7 7/8	Smith	F2-J	3560'	1934'	114	1000#
7	7 7/8	Smith	F3-J	4921'	1361'	131 3/4	12-1400#
8	7 7/8	Smith	F3-J	5430'	505'	50 1/2	1200#
9	7 7/8	HTC	J-33-J	5580'	150'	11 3/4	1200#

DEVIATION RECORD

<u>DEPTH</u>	<u>DEVIATION</u>
275'	1/8°
1626'	3/4°
3560'	1 1/4°
4347'	1°
4819'	1 1/2°
4912'	1/2°
5430'	1°

CHRONOLOGICAL SUMMARY

September 12 - 13 Moved in and rigged up.

September 14 Finished rigging up. Spudded
at 12 Noon. Drilling surface hole.

September 15 Finished drilling surface hole. Ran
and cemented 13 3/8 inch surface casing.
Waiting on cement. Nippled up.

September 16 Finished nipling up. Drilling 8 3/4 inch
pilot hole. Reamed with 9 3/4 inch bit.

September 17 Enlarged hole to 11 inch size.

September 18 Finished reaming. Ran and cemented
8 5/8 inch intermediate casing. Waiting
on cement. Nippled up.

September 19 Finished nipling up. Drilled out at
1:30 PM. Drilling ahead.

September 20 - 26 Drilling ahead.

September 27 Recemented 8 5/8 inch casing down backside.
Drilling ahead at 6:30 PM.

September 28 - 30 Drilling ahead.

October 1 - 6 Drilling ahead.

October 7 Ran Drill Stem Test #1.

October 8 Conditioned hole.
Ran Drill Stem Test #2.

October 9 Drilling ahead at 3:00 AM.
Reached T.D. at 7:45 PM.

October 10 Ran Schlumberger Logs.

October 11 Ran Drill Stem Test #3.

October 12 - 13 Waiting on casing.
Ran 4 1/2 inch production casing.

REMARKS

HYDROCARBON EVALUATION

Lower Ismay Zone:

The primary objective (Lower Ismay Zone 5348' to 5424') was found in samples, and confirmed by Drill Stem Test results and 'E' Log Analysis, to be tight and non-productive.

Desert Creek Zone:

A Drill Stem Test (#3) of an 8 foot zone (5526' to 5534') of 10 to 14% Density porosity resulted in a strong flow of gas and oil with excellent flow and shut-in pressure characteristics.

Samples indicate a Limestone of some very fine crystallinity along with some pinpoint and occasional vugular porosity. A fair hydrocarbon odor with some faint staining, bright yellow-white fluorescence and faint yellow-white delayed cut were also noted.

It is believed, that with proper completion practices, this serendipity porosity zone will result in more than adequate commercial production.

All other sands and carbonates penetrated are believed to be tight and/or water bearing.

OPERATIONS

Daily operations were conducted in good spirits.

The samples were taken to American Stratigraphic Company in Denver, Colorado for preservation and storage.

Achille Vitali, Jr.
Geologist

WILLIAM W. WHITLEY
 #1-24 Federal
 SW SE $\frac{1}{4}$ Section 24, T40S - R22E
 (650' F.S.L. & 1930' F.E.L.)
 San Juan County, Utah

SAMPLE DESCRIPTION

(Note: Samples not lagged unless otherwise noted.)

<u>FROM</u>	<u>TO</u>	<u>IN NAVAJO SANDSTONE</u>
600'	630'	(Poor Sample) 70% cement; 25% Siltstone, light to medium orange, very finely sandy, calcareous grading to Sandstone, light orange, very fine to fine grain, angular to sub-angular, friable, silty, all with abundant Shale, red brown, brown and orange brown, slightly calcareous, in part slightly silty.
630'	660'	Sandstone, very light orange, very fine to fine grain, sub-angular to sub-round, occasionally medium round grain, loose.
660'	690'	Sandstone, as above, increase in medium grain, sub-round to round grain type.
690'	720'	Sandstone, as above with 30% medium to coarse sub-round to round, occasional frosted grain type.
720'	750'	Sandstone, as above, 5 to 10% medium sub-round to round grain type.
750'	780'	Sandstone, as above with some in burnt orange, some very friable clusters, heavy trace sub-angular to round medium to coarse grain type.
780'	840'	Sandstone, predominately very fine with some very fine to fine grain, light to medium bright orange, loose heavy traces to 5% medium grain, round type.
840'	870'	Sandstone, very faint orange with faint salmon tinge, very fine to fine grain, sub-angular with trace medium round grain type, plus heavy trace Shale, red brown to chocolate, clay type, plus trace white chalky looking flakes, non-calcareous, soft.
<u>KAYENTA (?) - FORMATION</u>		
870'	900'	Sandstone, white with faint salmon to red brown tinge, predominately fine to medium grain, ranges from very fine to medium grain, angular with some sub-angular, loose, plus trace Shale, and white flakes, as above.

Sample Description
#1-24 Federal

FROM TO

Note: Extra Sample caught in 848-68 foot interval had high percentage (20 to 30%) Shale, red brown clay type and medium bright orange silty type.

900' 930' Sandstone, white with slight pinkish to red brown tinge, very fine to fine grain, some silty to medium grain, predominately angular, ranges to sub-angular with occasional scattered sub-round medium grain, plus traces Shale, red brown clay type and white flakes.

WINGATE FORMATION

930' 960' Sandstone, white with same type tinges as above, predominately fine grain, ranging from very fine to medium grain, predominately angular with some sub-angular.

IN CUTLER FORMATION

4000' 4090' Shale, predominately light to medium gray with slight blue cast, soft, sub-waxy clay type, in part sandy, occasionally finely pyritic with scattered Carbon debris, mottled with minor light to medium lavender-purple gray and purple chocolate, occasionally sandy and rarely micaceous, plus some Shale, brick red and orange red clay type, plus some Shale, bright orange, calcareous, soft, very finely sandy, plus light to heavy traces Limestone, pinkish, white, buff to tan, dense, soft to hard, (nodules?).

4090' 4120' Shales, as above, plus traces Limestone, as above, with increase of 10 to 15% of Shale and Siltstone, brick red and orange red types, plus trace larger Carbon debris, in part pyritized.

4120' 4150' Shales, as above, plus trace Limestone, as above, plus 15 to 25% Shale, brick red, orange red, chocolate and lavender clay type, plus very heavy trace Siltstone, orange red, calcareous, trace Gypsum, white and orange tinted.

4150' 4190' Shale, as above.

4190' 4220' Shale, light to medium gray with slight blue cast as above, plus trace Limestone, as above, plus 5% Shale and Siltstone of red, chocolate and lavender.

4220' 4240' Shales, gray blue as above, plus 10 to 15% Shale, orange red in part, silty, grading to Siltstone, orange red, calcareous plus abundant Shale, lavender clay type.

Sample Description
#1-24 Federal

<u>FROM</u>	<u>TO</u>	
4240'	4250'	Shales, as above, plus 5% Shale, brown clay type, in part finely micaceous, plus trace Limestone, as above.
4250'	4270'	Shales, predominately grays as above, in part with floating sand grains, plus 5 to 10% Shale, orange (silty), browns clay type, occasionally slightly and finely micaceous, plus trace light wine-lavender, occasional slight purple tint, plus trace Limestone, pink and white.
4270'	4300'	Shale, very light to light gray with slight blue tint in part, plus 10 to 20% Shale, orange red, (silty), brown (micaceous), trace lavender, light purple-gray, plus heavy traces to 5% Limestone, pink, tan to light brown, light buff gray, dense, hard, brittle, plus occasional trace Sandstone, light brown, very fine grain, angular, friable to firm, slightly calcareous to calcareous, tight.
4300'	4320'	Shale, predominately light to medium gray with blue cast, floating sand grains common, soft, sub-waxy clay type, plus some Shale, brown as above, medium purple-gray, brick and orange red, plus traces Limestone, predominately pinkish grading to white with pink tint, plus heavy trace Siltstone, tan to medium brown, very finely sandy, calcareous.
4320'	4330'	Missed.
<u>TOP HERMOSA FORMATION †4330'</u>		
4330'	4340'	Shales, as above, rest as above, very heavy traces Limestone, off-white, some with faint olive or buff mottling, faint buff gray, dense to crystalline, thinly tabular, brittle.
4340'	4350'	20% Limestone, as above, some with soft chalky edges with some off-white, tan, mottled to chalky, traces medium olive brown, dense, hard, brittle, plus trace brown microcrystalline type, plus rest Shales as above.
4350'	4380'	Limestone, white with some mottling of faint to light olive buff, occasionally tan, dense to slightly chalky, tabular, tight.
4380'	4400'	Limestone, as above, increase in chalky mashed flakes, some microcrystalline, all tight, plus heavy traces Chert, light amber, plus heavy trace Sandstone, off-white to faint gray, very fine grain to silt size, angular, firm, slightly calcareous, very tight.
4400'	4410'	Sample as above.

Sample Description
#1-24 Federal

<u>FROM</u>	<u>TO</u>	
4410'	4440'	Limestone, predominately white with some faint to light olive gray, occasional tan gray, predominately dense to slightly chalky in part, trace stylolitic seams - rehealed, all tight, rare trace Chert, faint amber to clear.
4440'	4450'	Limestone, as above with increase in chalky to mashed, flaky type, trace Chert, as above, plus trace Sandstone, as above.
4450'	4500'	(Very poor sample) Limestone, as above, occasional trace Limestone, white to clear crystalline (?sandy) type, rare trace Chert.
4500'	4530'	(Very poor sample) Traces Limestone, white, dense, rest caving.
4530'	4540'	Traces Limestone, as above, plus some Limestone, faint gray and tan, crystalline, tight, plus heavy trace Sandstone, light gray, very fine grain, angular, firm to slightly hard, slightly calcareous (dolomitic?), tight.
4440'	4550'	Traces Limestone, as above, rest caving.
4550'	4580'	Trace Limestone, white, dense, flaky to blocky type.
4580'	4590'	Traces Limestone, as above, plus some Sandstone, light brown, very fine grain, firm, very calcareous, slightly and very finely micaceous, looks tight.
4590'	4600'	Limestone, white, dense type, plus trace Chert, amber to clear.
4600'	4650'	Limestone, predominately white with some buff to very light tan, dense with some microcrystalline and occasionally crystalline, some chalky, all tight.
4650'	4690'	Limestone, as above, trace with scattered Pyrite crystals, all tabular to flaky.
4690'	4700'	Limestone, as above, some faint gray buff and few pieces medium gray, some mottled with light brown spots, fossiliferous? looks tight, trace Chert.
4700'	4740'	Limestone, as above.
4740'	4790'	Limestone, predominately white, some occasionally faint buff, flaky to tabular, some microcrystalline to crystalline, mostly dense, occasionally chalky, tight.
4790'	4800'	Limestone, as above, some faint olive gray, light to medium olive brown, dense to tabular to blocky, tight.
4800'	4840'	Limestone, predominately white types as above, some faint gray.

Sample Description
#1-24 Federal

<u>FROM</u>	<u>TO</u>	
4840'	4850'	Limestone, white, increase in faint to light gray, buff to tan and light brown, some with olive cast, dense with occasionally some microcrystalline, predominately tabular, brittle, tight.
4840'	4900'	Limestone, as above, plus some medium to dark gray, cryptocrystalline to microcrystalline, tight looking, chunky, occasional rare lavender, dense, blocky.
4900'	4920'	Limestone, as above, some dark gray to black, microcrystalline, shaly in part grading to black, very calcareous Shale (?) plus traces lavender type, dense to cryptocrystalline, blocky, all tight.
4920'	4940'	Limestone, as above, less of gray and black types.
4940'	4950'	Limestone, off-white with faint buff cast to faint gray-buff, dense to tabular to blocky, some traces chalky, traces medium olive with slight brown cast, all tight, plus trace Chert, clear to faint amber.
4950'	4980'	Limestone, as above, grading to buff to tan and light brown, some becoming dolomitic in part, traces Chert, clear to tan to light brown, hard, brittle, sharp edges.
4980'	5000'	Limestones, as above, with 5 to 10% Limestone, very dark gray to black, slightly shaly, flaky, cryptocrystalline to microcrystalline, tight, trace Shale, black, sooty, slightly calcareous, trace Chert.
5000'	5040'	Limestone, off-white with faint buff cast to buff and occasionally very light gray-buff, dense to cryptocrystalline, some chalky, occasional trace medium gray, microcrystalline, all appear tight, 5 to 10% very faint dull yellow mineral fluorescence.
5040'	5100'	Limestone, as above, 15 to 25% light to medium gray with buff to light brown cast, cryptocrystalline to microcrystalline, all flaky to tabular, plus light to heavy fraction chalky, off-white type, all tight, 5 to 10% very faint dull yellow mineral fluorescence, plus trace Shale, dark gray, calcareous, flaky.
5100'	5110'	Limestone, as above.
5110'	5120'	Poor sample, Limestone, as above.
5120'	5130'	25% Shale, very dark gray to black, flaky, sub-fissile to fissile, calcareous, very finely micaceous, plus Limestone, off-white to faint buff and faint buff-gray, dense to cryptocrystalline to some chalky, all tight, mineral fluorescence as above.

Sample Description
#1-24 Federal

<u>FROM</u>	<u>TO</u>	
5130'	5150'	Limestone, as above, some buff to light tan, traces Chert, clear to faint amber, plus traces to heavy trace Shale, very dark gray to black, as above.
5150'	5180'	Limestone, off-white, some with buff cast to very light buff-gray, dense to cryptocrystalline, in part chalky, in small part slightly fossiliferous, occasional trace Chert, faint buff to very light tan, 5 to 10% faint gold mineral fluorescence, No cut.
5180'	5200'	Sample had 10 to 15% Shale, very dark gray to black, flaky, calcareous, fissile.
5200'	5240'	Limestone, as above, in small part slightly and finely sandy, fluorescence as above, with 1 to 2 pieces with light yellow cut.
<u>ISMAY ZONE(?)</u>		
5240'	5280'	Dolomitic Limestone to Dolomite, medium gray with brown cast to light brown, dense to cryptocrystalline, tabular to blocky, plus light to heavy tan to light brown Chert, ⁺ 5% very faint gold mineral fluorescence, No cut.
5280'	5300'	Limestone, off-white to very light gray, chalky to cryptocrystalline to dense, soft to firm and brittle, all looks tight plus heavy traces Dolomite as above. (in 5280-90 foot sample), trace faint yellow gold fluorescence (mineral?), No cut.
5300'	5330'	Limestone, off-white with faint buff to faint to light olive gray, dense to cryptocrystalline, some chalky looking, flaky to tabular to occasionally slightly blocky, all very tight looking, 5% faint yellow-gold mineral fluorescence.
<u>LOWER ISMAY ZONE (?)</u>		
5330'	5340'	Limestone, as above, plus Limestone, medium to dark brown-black, dense to cryptocrystalline, trace microcrystalline, tight looking, few pieces with faint dull yellow fluorescence to very faint delayed yellow-white crushed cut, further delayed cut becoming bright yellow-white cut, plus trace Chert, dark brown.
5340'	5350'	40 to 50% Limestone, dark brown to brown black, as above (color appears to be oxidized or residual oil stain?), all appears tight, (very questionable porosity in traces microcrystalline type), traces fluorescence and cut as above, plus heavy trace Chert, dark brown to black, as above, plus rest Limestone as in 5300-30 foot sample.

Sample Description
#1-24 Federal

<u>FROM</u>	<u>TO</u>	
5350'	5390'	Limestone, predominately dark brown to brown-black, some medium gray mottled brown to brown-black, dense to crypto-crystalline predominately, small fraction microcrystalline (scattered), rest as above with show being same or less, very heavy trace Chert, dark brown type, flaky to blocky, brittle sharp edges.
5390'	5400'	30% Limestone, as above type, with 70% Limestone, off-white to very light gray buff, light to medium gray-olive, dense to cryptocrystalline, some chalky looking, all looks tight, questionable faint yellow gold fluorescence, no cut, 5% Chert, dark brown-black type.
5400'	5410'	Limestone, slightly dolomitic in part, off-white to very light gray, dense to cryptocrystalline, some chalky looking, all looks tight, questionable faint yellow-gold mineral fluorescence, No cut.
5410'	5430'	Limestone, as above, trace with vugs with secondary Calcite filling, traces of dark gray, microcrystalline, black stain in part, some free Calcite with faint yellow-white fluorescence and light yellow crushed cut, plus increase in Shale, very dark gray to black, some sooty looking, soft, mostly flaky, calcareous, firm.
<u>Drilling Break 5404' to 5406' Drilled 1 and 2 minutes per foot.</u>		
<u>Drilling Break 5409' to 5412' Drilled 2 minutes per foot.</u>		
<u>'C' Shale 5412' - Based on reverse drilling break</u>		
5430'		<u>45 Minute Circulation Sample</u> Shale, predominately black, in part sooty and grainy looking, firm, calcareous, grading in part to Limestone, dark gray, shaly, plus Limestone, as above.
5430'	5450'	Shale, black predominately, some dark gray, flaky, slightly blocky, sub-fissile in part, sooty and carbonaceous looking in part, slightly calcareous to calcareous plus some grading to Limestone, dark gray, shaly, dense to earthy looking plus heavy trace Limestone, white, chalky, soft, plus some white microcrystalline.
5450'	5470'	Shale, black, chunky to blocky, calcareous, very finely micaceous in part, carbonaceous looking, trace Pyrite cluster.

Sample Description
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FROM TO DESERT CREEK ZONE

- 5470' 5490' Limestone, medium to dark gray, shaly, earthy looking in part, finely grainy looking, occasionally finely pyritic, plus heavy trace Anhydrite in 5480-90 foot sample, white to light gray, mottled in part, finely crystalline.
- 5490' 5500' Predominately Anhydrite, white, crystalline looking, veined and mottled medium to dark gray, earthy and shaly and calcareous, soft to firm, intermixed with Limestone, as above.
- 5500' 5510' Limestone, light to medium to dark gray, earthy looking, (shaly?), dense to cryptocrystalline, some white to very light gray, some chalky and soft, No Show.
- 5510' 5520' Limestone, predominately off-white to very light gray, tabular to blocky, dense, heavy trace medium to dark gray earthy type, as above, some chalky, as above, No Show.
- 5520' 5540' Limestone, predominately off-white to very light gray with olive cast, dense, tabular, plus some white, chalky and soft, No Show.
- 5540' 5550' Limestone, as above with heavy trace having asphaltic incrustated stylolite and/or vugs, some of crushed chalky type, bright yellow-white fluorescence and very faint yellow crushed cut.
- 5550' 5560' Limestone, as above, small fraction with pinpoint and vugular porosity and permeability, some with bright yellow fluorescence and faint stain, some with black asphaltic stain, No fluorescence, 30% faint yellow fluorescence, pieces with bright yellow fluorescence have bright yellow-white delayed cut.

Extra Sample at 5563'

Limestone, off-white to faint buff, largely cryptocrystalline to microcrystalline with some pinpoint and occasional vugular porosity, faint stain, fair odor, with 50%⁺ bright yellow-white fluorescence, light yellow-white delayed cut.

Extra Sample at 5568'

Limestone, as above, some becoming light to medium gray in part with slight brown cast, in part earthy looking, trace evidence of porosity and permeability and vug porosity and permeability, 5% with bright yellow fluorescence, cut as above.

- 5560' 5570' Limestone, as above in 5568 foot sample, 5 to 10% bright yellow fluorescence, microcrystalline type has faint stain and scattered black asphaltic stain, shaly earthy type is tight, No Show.

Sample Description
#1-24 Federal

FROM TO

5570' 5580' Limestone, off-white to light gray, dense, some medium gray as above, trace of microcrystalline and pinpoint and vugular type, trace very faint yellow fluorescence, questionable very faint cut, heavy fraction of Shale, black, tabular, firm, calcareous.

30 to 60 Minute Circulation Samples

Shale, medium to dark gray, very calcareous, grading to Limestone, light to medium gray, shaly, all very finely micaceous, tabular, firm, plus abundant Shale, very dark gray to black, carbonaceous looking, calcareous, in part very finely micaceous.



william w. whitley
1705 colorado state bank building
1600 broadway
denver · colorado · 80202
phone (303) 861-2469

RECEIVED

JAN 14 1980 January 11, 1980

DIVISION OF
OIL, GAS & MINING

STATE OF UTAH
Natural Resources, Oil and Gas
1588 West, North Temple
Salt Lake City, Utah 84116

Re: Whitley #1-24 Federal
SW SE Section 24-T40S-R22E
San Juan County, Utah

Gentlemen:

We have previously provided you with copies of the Well Completion Report on the above-listed well. Will you please hold the information confidential.

Very truly yours,

William W. Whitley

WILLIAM W. WHITLEY

WWW:sas

**UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

SUBMIT IN DUPLICATE*

Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

15

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

5. LEASE DESIGNATION AND SERIAL NO.

U-42474

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Federal

9. WELL NO.

1-24

10. FIELD AND POOL, OR WILDCAT

Wildcat

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

Sec. 24-T40S-R22E

12. COUNTY OR PARISH

San Juan

13. STATE

Utah

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 _____

2. NAME OF OPERATOR
William W. Whitley

3. ADDRESS OF OPERATOR
1600 Broadway, Ste 1705 - Denver, CO 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface 620' FSL, 1930' FEL, SW/4 SE/4
At top prod. interval reported below
At total depth

14. PERMIT NO. 43-037-30493 DATE ISSUED 7/13/79

15. DATE SPUNDED 9/14/79 16. DATE T.D. REACHED 10-9-79 17. DATE COMPL. (Ready to prod.) 12-5-79 18. ELEVATIONS (DF, RKB, RT, GB, ETC.)* 4457' GR, 4469' KB 19. ELEV. CASINGHEAD 4457' KB

20. TOTAL DEPTH, MD & TVD 5580' Driller 21. PLUG, BACK T.D., MD & TVD 5573' KB 22. IF MULTIPLE COMPL., HOW MANY* N/A 23. INTERVALS DRILLED BY 0-5580' 24. ROTARY TOOLS N/A 25. CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 5526-34' K.B. - Desert Creek 25. WAS DIRECTIONAL SURVEY MADE No

26. TYPE ELECTRIC AND OTHER LOGS RUN Schlumberger - Dual Induction & GR Formation Density Neutron Compensated 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"	48	204' K.B.	17 1/2"	200 sx Class B w/2% CaCl ₂	None
8 5/8"	24	953' K.B.	11"	200 sx Class B w/2% CaCl ₂	None
4 1/2"	10.5	5582' K.B.	7 7/8"	200 sx 50-50 Pozmix w/2% Gel & 10% Salt	None

29. LINER RECORD 30. TUBING RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
N/A					2 3/8" EUE	5409' KB	None

31. PERFORATION RECORD (Interval, size and number)
5526-34' K.B. w/2 jets / ft. - total 16 holes, 1 11/16" diameter glass jets

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.
DEPTH INTERVAL (MD) 5526-34' K.B. AMOUNT AND KIND OF MATERIAL USED Acidized w/1000 gals. of 28% HCL Acid

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing, Shut-in)					
12/6/79	Flowing	Producing					
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
12/10/79	24	12/64"	→	216.0	56.8	None	263 to 1
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OR GRAVITY-API (CORR.)	
500	500	→	216.0	56.8	None		

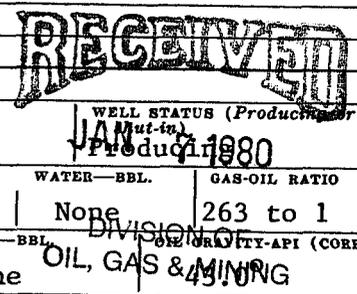
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Vented TEST WITNESSED BY Bush Chancey

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 Robert W. Chancey TITLE Petroleum Engineer DATE January 2, 1980

*(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 35.

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.)

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.
See attached Well History			

38.

GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH



PETROLEUM
MANAGEMENT

SUITE 1700 • 1600 BROADWAY • DENVER • COLORADO 80202 • PHONE (303) 861-2470

March 28, 1984

State of Utah
Natural Resources
Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

Attn: Oil & Gas Information System
Development Task Force, Attention Norm Stout

Re: Records Reconciliation

Gentlemen:

In response to your recent Memorandum concerning your development of an automated system for the reporting of oil and gas information, you will find enclosed in triplicate:

- 1) Your computer print-out with written changes noted,
- 2) Letter re Change of Operator to Division of Oil, Gas and Mining dated March 19, 1984,
- 3) Sundry Notice indicating Change of Operator for the 1-24 Federal, 1-25 Kirkwood-Federal, 1-25 3-E Federal and 2-25 3-E Federal wells, and,
- 4) Sundry Notice indicating Change of Operator for the 1-25A KGS Federal well (Communitized).

If there is any further information you require, please let us know.

Very truly yours,

Sally Scheiman
Secretary

/ss
Enclosures

RECEIVED

APR 2 1984

DIVISION OF
OIL, GAS & MINING

**UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

SUBMIT IN DUPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.
U-42474, U-18433,
U-41696

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

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

<p>1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/></p> <p>2. NAME OF OPERATOR William W. Whitley (past) P & M Petroleum Management (current)</p> <p>3. ADDRESS OF OPERATOR 1600 Broadway, Suite 1700, Denver, CO 80202</p> <p>4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface see below</p> <p>14. PERMIT NO. see below</p>	<p>7. UNIT AGREEMENT NAME</p> <p>8. FARM OR LEASE NAME</p> <p>9. WELL NO. See below</p> <p>10. FIELD AND POOL, OR WILDCAT Turner Bluff</p> <p>11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 24, 25 - T40S-R22E</p> <p>12. COUNTY OR PARISH 13. STATE San Juan Utah</p>
<p>15. ELEVATIONS (Show whether DF, ST, GR, etc.)</p>	

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

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <u>Change of Operator</u> <input checked="" type="checkbox"/>	

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

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

API	WELL	LOCATION	LEASE
43-037-30493	1-24 Federal	24, T40S, R22E - SWSE	U-42474
43-037-30522	1-25 Kirkwood-Federal	25, T40S, R22E - NENW	U-41696
43-037-30540	1-25 3-E Federal	25, T40S, R22E - NENE	U-18433
43-037-30546	2-25 3-E Federal	25, T40S, R22E - SWNE	U-18433

Change Operator on above wells from William W. Whitley, to:

P & M Petroleum Management
1600 Broadway, Suite 1700
Denver, CO 80202
(303) 861-2470
Bob Peterson/Julie Spurlock

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APR 2 1984

DIVISION OF
OIL, GAS & MINING

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

SIGNED Robert W. Nelson TITLE Petroleum Engineer DATE 3/27/84

(This space for Federal or State office use)

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

March 19, 1984

State of Utah
Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

Re: Change of Operator
U-42474, U-18433, U-52026,
U-23797, U-41696
San Juan County, Utah

Gentlemen:

Upon receipt of a memo from Oil, Gas and Mining's Oil & Gas Information Systems - Development Task Force this date regarding Records Reconciliation - Action Required, I realized I had failed to send Change of Operator forms to the State. Accordingly, enclosed are copies of Change of Operator from William W. Whitley to P & M Petroleum Management on leases U-42474, U-18433 (2 - drillsite acreage and the balance of the acreage) and communitized leases U-52026 with Beard Oil Company's U-23797 Section 25, together with the Successor Operating Agreement between William C. Kirkwood and P & M Petroleum Management covering lease U-41696.

If there is any further information you need, please let me know. I apologize for this oversight.

Very truly yours,

Sally Scheiman
Secretary

/ss
Enclosures

RECEIVED

APR 2 1984

DIVISION OF
OIL, GAS & MINING

~~WHITLEY, WILLIAM W.~~ P + M Petroleum Management (See attached letter and Sundry notices)
 1600 BROADWAY, SUITE ~~1705~~ 1700
 DENVER CO 80202
 ATTN: ~~WILLIAM W. WHITLEY~~
 ROBERT W. PETERSON / JULIE SPURLOCK

PHONE: 303-861-~~2469~~
 2470

YOUR UTAH ACCOUNT NUMBER: N3270
 PRODUCING ENTITY NUMBER: 00415
 PRODUCING ENTITY NAME : TURNER BLUFF FIELD

API	ZONE	WELL NAME	SECTION	TOWNSHIP	RANGE	QTR-QTR
43-037-30493	DSCR	1-24 FEDERAL	24	40.0-S	22.0-E	SWSE
43-037-30522	IS-DC	1-25 KIRKWOOD FED.	25	40.0-S	22.0-E	NENW
43-037-30540	ISMY	1-25 3-E FED	25	40.0-S	22.0-E	NENE
43-037-30546	DSCR	2-25 3-E FED	25	40.0-S	22.0-E	SWNE
43-037-30906	DSCR	1-25A KGS FEDERAL*	25	40.0-S	22.0-E	SENE SWNW

* Communitized. Change of Operator still pending at BLM.

NOTE: EACH OF THE ABOVE WELLS HAS A SEPARATE TANK BATTERY (and meter where applicable).

RECEIVED

APR 2 1954

DIVISION OF OIL, GAS & MINING

P+A

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

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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

5. LEASE DESIGNATION AND SERIAL NUMBER:

U-42474

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:

8. WELL NAME and NUMBER:

Federal #1-24

9. API NUMBER:

037-30493

10. FIELD AND POOL, OR WILDCAT:

Turner Bluff

1. TYPE OF WELL

OIL WELL

GAS WELL

OTHER _____

2. NAME OF OPERATOR:

P&M Petroleum Management, LLC

3. ADDRESS OF OPERATOR:

518 17th Street, Suite 1105 CITY Denver

STATE CO ZIP 80202

PHONE NUMBER:

(303) 260-7129

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 620' FSL & 1930' FEL 24 40S 22E

COUNTY: San Juan

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWSE 25 40S 22E

STATE:

UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input checked="" type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: 6/18/1997	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

SEE ATTACHED

NAME (PLEASE PRINT) Jerry Calley

TITLE Managing Member

SIGNATURE

DATE 5/13/2010

(This space for State use only)

RECEIVED

MAY 18 2010

DIV. OF OIL, GAS & MINING

1. Move on Big A Workover Rig and rig up on Federal #1-24.
2. Unseat pump. Waiting on hot oil unit.
3. Hot Oil down tubing. Pull rods and lay down. N.U. BOP. Strap out tubing.
4. R.U. wireline truck. Ran gauge ring and CIBP and set at 5425' K.B.
5. Set CIBP 5425' K.B. Set 10sx cement plug on top of bridge plug. Mix and pump mud.
6. Nipple down BOP and well head. Weld on extension
7. Run collar locator to 2450' K.B. Shot casing off at 2435' K.B. Set casing slips.
8. Blxed down casing head. Mix gel and bar too kill casing. S.I. with 1000psi.
9. Cut off sub. NU tubing hanger and BOP.
10. Run gauge ring to 2450'. Perf 4 1/2" at 2400". Pump into formation.
11. Run in with cement retainer and set at 2356'.
12. Spot cement plug. Lay down 96 Jts. Tubing.
13. Perf at 1600'. Run cement retainer and set at 1497'.
14. Pump 326sx cement. Trip out and shut down.
15. Run cement bond log. Trip in and tag cement.
16. Perf 5 holes at 968' and pumped into formation.
17. Trip in with tubing to 900'. Cemented and squeezed with 260sx cement. Shut in with pressure. SD.
18. Pull on tubing. Perf at 1100'. Could not pump into formation.
19. Perf at 340' and cooled not pump into formation.
20. Perf at 240' and could not pump into formation.
21. Perf at 50'. Established circulation.
22. Set 15sx cement plug.
23. Circ cement to surface.
24. Clean out celler.
25. Cut off well head
26. Leveled off location and reseeded.



P.O. Drawer 3337, 700 S. Tucker, Farmington, New Mexico 87499
(505) 327-4961 • 24-Hour Dispatch (505) 325-6892 • (505) 327-0416

P&A OPERATION CEMENT SERVICE REPORT

WELL NAME: FEDERAL #1-24

TOTAL PLUGS SET: 6

DATE STARTED: 06-09-97

TOTAL SACKS USED: 665 sx.

DATE COMPLETED: 06-18-97

BLM WITNESS: JEFF BROWN

OPERATOR WITNESS: J. BINKLEY

PLUG # 1 (5294' - 5495')

CIBP WAS SET @ 5425' AND 10 SX CLASS B CEMENT WAS SPOTTED ON TOP. A MUD PLUG WAS SPOTTED @ 4450' - 5287' WITH 13 BBL 9.0 PPG MUD.

PLUG # 2 (2251' - 2400')

CASING WAS CUT @ 2400' AND WAS NOT SUCCESSFUL (stretch calculation showed FP @ 1865'). A RETAINER WAS SET @ 2356' AND FORMATION WAS SQUEEZED WITH 18 SX CLASS B CEMENT TO 500 PSI. 10 SX WAS PUT BELOW RETAINER AND 8 SX WAS PLACED ON TOP. MUD WAS SPOTTED @ 2210' - 1600' WITH 10 BBL 9.0 PPG MUD.

PLUG # 3 (980' - 1497')

PERFORATED @ 1600' WITH 3 SHOTS AND SET A RETAINER @ 1497' AND SQUEEZE FORMATION WITH 326 SX CLASS B CEMENT TO 1500 PSI. 316 SX WAS PUT BELOW RETAINER AND 10 SX WAS PLACED ON TOP.

PLUG # 4 (432' - 968')

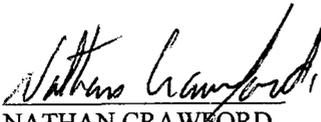
PERFORATED @ 968' WITH 5 SHOTS AND RAN IN OPEN ENDED TO 930'. PUMP 260 SX CLASS B CEMENT AND PULL UP ONE STAND AND SQUEEZE TO 700 PSI. WOC. TUBING STUCK IN THE HOLE, BACK OFF TUBING AND LEFT 12 JTS. IN HOLE.

PLUG # 5 (0' - 50')

PERFORATE @ 400', 340' AND 240' COULD NOT PUMP. HELD 500 PSI TEST. PERFORATE @ 50' AND CIRCULATE CEMENT TO SURFACE WITH 15 SX CLASS B CEMENT.

PLUG # 6 (TOP OFF)

WELL HEAD WAS CUT OFF AN CASINGS WERE TOPPED OFF WITH 36 SX CLASS B CEMENT.


NATHAN CRAWFORD
P&A SUPERVISOR



1-24 Federal

P.O. Drawer 3337, 700 S. Tucker, Farmington, New Mexico 87499
(505) 327-4961 • 24-Hour Dispatch (505) 325-6892 • (505) 327-0416

JUNE 23, 1996

INVOICE NO: 14229P

TO: PETROLEUM MANAGEMENT
1600 BROADWAY SUITE 1700
DENVER, CO 80202

WELL: FEDERAL # 1-24
LEGALS: SEC.24, T40S, R22E
LOCATION: U-42474
UNIT NO: 8
OPERATOR: JOE HERRERA
CODE: 37-DC-Z

ATTN: BOB PETERSON

BID PRICE TO PLUG & ABANDON WELL: \$ 18,211.00

DATE WORK STARTED: 06-09-97

DATE WORK COMPLETED: 06-18-97

ADDITIONAL CHARGES OR CREDITS

44.5 RIG HRS @ \$145.00/HR (Bidded at 36 Hrs)	6,452.50
30.0 HRS TRAVEL @ \$74.00/HR	2,220.00
7.0 DAYS PICKUP @ \$74.00/DAY	518.00
2.0 HRS TRUCKING (FLOAT F/TUBING) @ \$56.00/HR	112.00
2.0 4 1/2" RETAINER @ \$800.00/EA	1,600.00 *
20.0 PERFORATIONS @ \$40.00/EA	800.00 *
1.0 HOT SHOT ON EXTRA PERFORATIONS	210.00
8.0 HRS DOWN TIME @ \$145.00/HR <CREDIT>	<1,160.00>
1.0 MUD NOT USED <CREDIT>	<507.00>
1.0 CaCl2 NOT USED <CREDIT>	<174.00>
40.0 SX CEMENT @ \$9.00/SX <CREDIT>	<360.00>

LISTED FOR TAXABLE PURPOSE ONLY "ITEMS INCLUDED IN BID"

1 DRY HOLE MARKER	300.00 *
1 CASING CUTTER	600.00 *
1 4 1/2" CIBP	400.00 *
650 SX CEMENT @ \$9.00/SX	5,850.00 *
7 BAGS GEL @ \$6.50/BAG	45.50 *
11 BAGS BARITE @ \$7.50/BAG	82.50 *

SUB TOTAL	\$ 27,922.50
5.875% UT RBM TAX	568.58
TOTAL	\$ 28,491.08

* Indicates taxable items

Thank You,

Signed

INTEREST CHARGED AT THE RATE OF 1.5% PER MONTH OR 18% PER ANNUM ON ACCOUNTS NOT PAID WITHIN 30 DAYS. ALL COSTS AND REASONABLE ATTORNEY FEES FOR COLLECTION WILL BE PAID BY PURCHASER.

RECEIVED JUN 30 1997