

RECEIVED

SEP 28 1987

FILING FOR WATER IN THE STATE OF UTAH

Rec. by gr

Fee Rec. 30.00

Receipt # 23342

NOV 30 1987

Microfilmed _____

Roll # _____ RECEIVED



DEC 02 1987

APPLICATION TO APPROPRIATE WATER

SALT LAKE

TEMPORARY

For the purpose of acquiring the right to use a portion of the inappropriated water of the State of Utah, application is made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of the Laws of Utah.

WATER RIGHTS PRICE

* WATER RIGHT NO. 09 - 1547

* APPLICATION NO. A T62981

1. *PRIORITY OF RIGHT: November 25, 1987 * FILING DATE: November 25, 1987

2. OWNER INFORMATION

Name(s): BWAB Incorporated * Interest: 100 %
Address: 1801 California St., Suite 1000, Denver, CO 80202
City: Denver State: CO Zip Code: 80202

Is the land owned by the applicant? Ye
(If "No", please _____)

Rula, for filming. ction.)

3. QUANTITY OF WATER: _____ 0.5 ac-ft

*5-10-88 for file
(3 wells)*

4. SOURCE: Ponds at Perkins Ranch
which is tributary to _____
which is tributary to _____

POINT(S) OF DIVERSION: San Juan
Water will be trucked from ponds at the Perkins Ranch in Section 12 of T38S-R24E, San Juan County, UT.

N. 697 ft. & W. 2288 ft. from SE Cor. Sec. 12, T38S, R24E, SLB&M. Cajon Mesa Quad

Description of Diverting Works: Water to be hauled from ponds using licensed trucking contract water transports.

* COMMON DESCRIPTION: 8.5 miles North of Hatch Trading Post

5. POINT(S) OF REDIVERSION

The water will be rediverted from N/A at a point: _____

Description of Rediverting Works: _____

6. POINT(S) OF RETURN

The amount of water consumed will be _____ cfs or 0.5* ac-ft

The amount of water returned will be _____ cfs or 0 ac-ft

The water will be returned to the natural stream/source at a point(s): _____

7. STORAGE

Reservoir Name: Temp. Earth Pit Storage Period: from Jan 1, 1987 to Feb. 15, 1987

Capacity: 1.8 ac-ft. Inundated Area: .23 acres

Height of dam: 8.0 feet

Legal description of inundated area by 40 acre tract(s): SWNE Sec. 15-T38S-R25E, San Juan Co., UT

*Most of the water will not be permanently removed from the ecosystem as it will evaporate and percolate from the reserve pit. Only about 1/3 of the .5 ac-ft will be lost to future use.
* These items are to be completed by the Division of Water Rights

Appropriate

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SEP 28 1987

FILING FOR WATER IN THE STATE OF UTAH

Rec. by gjs
Fee Rec. 30.00
Receipt # 23342

NOV 30 1987

BWAB INCORPORATED
DEC 02 1987

APPLICATION TO APPROPRIATE WATER

Microfilmed _____
SALT LAKE CITY Roll # _____
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TEMPORARY

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2. OWNER INFORMATION

Name(s): BWAB Incorporated * Interest: 100 %
Address: 1801 California St., Suite 1000, Denver, CO 80202
City: Denver State: CO Zip Code: 80202
Is the land owned by the applicant? Yes _____ No X
(If "No", please explain in EXPLANATORY section.)

3. QUANTITY OF WATER: _____ cfs and/or 0.5 ac-ft

4. SOURCE: Ponds at Perkins Ranch * DRAINAGE: _____
which is tributary to _____
which is tributary to _____

POINT(S) OF DIVERSION: _____ COUNTY: San Juan
Water will be trucked from ponds at the Perkins Ranch in Section 12 of T38S-R24E, San Juan County, UT.
N. 697 ft. & W. 2288 ft. from SE Cor. Sec. 12, T38S, R24E, SLB&M. Cajon Mesa Quad
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The amount of water consumed will be _____ cfs or 0.5* ac-ft
The amount of water returned will be _____ cfs or 0 ac-ft
The water will be returned to the natural stream/source at a point(s): _____

7. STORAGE

Reservoir Name: Not named Temp. Earth Pit Storage Period: from Jan 1, 1987 to Feb. 15, 1987
Capacity: 1.8 ac-ft. Inundated Area: .23 acres
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Legal description of inundated area by 40 acre tract(s): SWNE Sec. 15-T38S-R25E, San Juan Co., UT

*Most of the water will not be permanently removed from the ecosystem as it will evaporate and percolate from the reserve pit. Only about 1/3 of the .5 ac-ft will be lost to future use.
* These items are to be completed by the Division of Water Rights

Appropriate

8. List any other water rights which will supplement this application _____

9. NATURE AND PERIOD OF USE

Irrigation:	From _____ to _____
Stockwatering:	From _____ to _____
Domestic:	From _____ to _____
Municipal:	From _____ to _____
Mining:	From _____ to _____
Power:	From _____ to _____
Other:	From <u>Dec. 15, 1987</u> to <u>June 30, 1988</u>

10. PURPOSE AND EXTENT OF USE

Irrigation: _____ acres. Sole supply of _____ acres.
 Stockwatering (number and kind): _____
 Domestic: _____ Families and/or _____ Persons
 Municipal (name): _____
 Mining: _____ Mining District in the _____ Mine
 Ores mined: _____
 Power: Plant name: _____ Type: _____ Capacity: _____
 Other (describe): Drilling of Oil & Gas Well

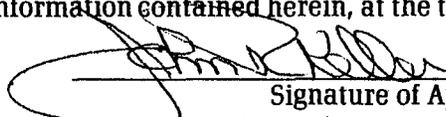
11. PLACE OF USE

Legal description of place of use by 40 acre tract(s): Sec. 15-T38S-R25E, San Juan Co., UT
SWNE
 Well to be drilled: Muckleshoot Federal #15-32. 43-037-31380 PA

12. EXPLANATORY

The following is set forth to define more clearly the full purpose of this application. (Use additional pages of same size if necessary): Closest available water that has sufficient quantity and quality to drill the well.

The applicant(s) hereby acknowledges that he/she/they are a citizen(s) of the United States of America or intends to become such a citizen(s). The quantity of water sought to be appropriated is limited to that which can be beneficially used for the purposes herein described. The undersigned hereby acknowledges that even though he/she/they may have been assisted in the preparation of the above-numbered application through the courtesy of the employees of the Division of Water Rights, all responsibility for the accuracy of the information contained herein, at the time of filing, rests with the applicant(s).



 Signature of Applicant(s)
 John R. Keller
 Drilling & Production Manager

TEMPORARY

STATE ENGINEER'S ENDORSEMENT

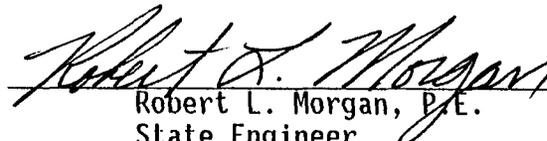
WATER RIGHT NUMBER: 09 - 1547

APPLICATION NO. T62981

1. November 25, 1987 Application received by MP.
 2. November 25, 1987 Application designated for APPROVAL by MP and KLJ.
 3. Comments:
-
-

Conditions:

This application is hereby APPROVED, dated December 1, 1987, subject to prior rights and this application will expire on December 1, 1988.


Robert L. Morgan, P.E.
State Engineer



December 8, 1987

State of Utah
Natural Resources
Oil, Gas & Mining
355 W. North Temple
3 Triad Center
Suite 350
Salt Lake City, UT 84180-1203

RECEIVED
DEC 9 1987

DIV.
OIL, GAS & MINING

ATTENTION: JOHN BAZA

RE: Muckleshoot Federal #15-32
SWNE Sec. 15-T38S-R25E
San Juan Co., UT

Dear Sir:

Enclosed herewith are three (3) copies of our Application For Permit To Drill for the above referenced well. If this meets with your approval, please execute and return one (1) copy to me for our files.

If you should have any questions in this regard or require additional information, please contact the undersigned at your earliest convenience.

Very truly yours,

BWAB Incorporated

Carrie M. Sullivan

Carrie M. Sullivan

:CMS

Enclosures (3)

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

(Other instructions on reverse side)

5. Lease Designation and Serial No.

U-47970

6. If Indian, Allottee or Tribe Name

APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK

1a. Type of Work

DRILL

DEEPEN

PLUG BACK

7. Unit Agreement Name

b. Type of Well

Oil Well

Gas Well

Other

DEC 9 1987

Single Zone

Multiple Zone

8. Farm or Lease Name

2. Name of Operator

BWAB Incorporated

DIVISION OF
OIL, GAS & MINING

Muckleshoot Federal

3. Address of Operator

1801 California St., Suite 1000, Denver, CO 80202

9. Well No.

#15-32

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

10. Field and Pool, or Wildcat

Undesignated

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

Sec. 15-T38S-R25E

At surface

2600' FEL & 1890' FNL SWNE

12. County or Parrish 13. State

San Juan UT

At proposed prod. zone

Within 75' radius of 2100' FEL & 1550' FNL SWNE

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

16 miles SE of Blanding, Utah

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. line, if any)

540'

16. No. of acres in lease

640

17. No. of acres assigned to this well

40

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

NA

19. Proposed depth

5,900'

20. Rotary or cable tools

Rotary

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

5247' GL

22. Approx. date work will start*

12/15/87

23.

PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
12-1/4"	8-5/8"	24# or 32#	1590'	610 sxs - Circ to surface
7-7/8"	5-1/2"	15.5# or 17#	5900'	250 sxs

1. Notify BLM 24 hrs. prior to spud.
2. Drill to 1590'. Set 8-5/8" surface pipe cemented to surface.
3. Pressure test BOP and surface casing.
4. Directionally drill to 5900' TD and test the productivity of the Ismay and Desert Creek Formations.
5. Plug as per BLM instructions or run production casing as appropriate. Cement production string to approximately 4300'.

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

John R. Keller
John R. Keller

Title Drlg & Prod Manager

Date 12/8/87

(This space for Federal or State office use)

Permit No.

43-037-31380

Approval Date

APPROVED BY THE STATE

OF UTAH DIVISION OF

OIL, GAS AND MINING

Approved by

Title

Conditions of approval, if any:

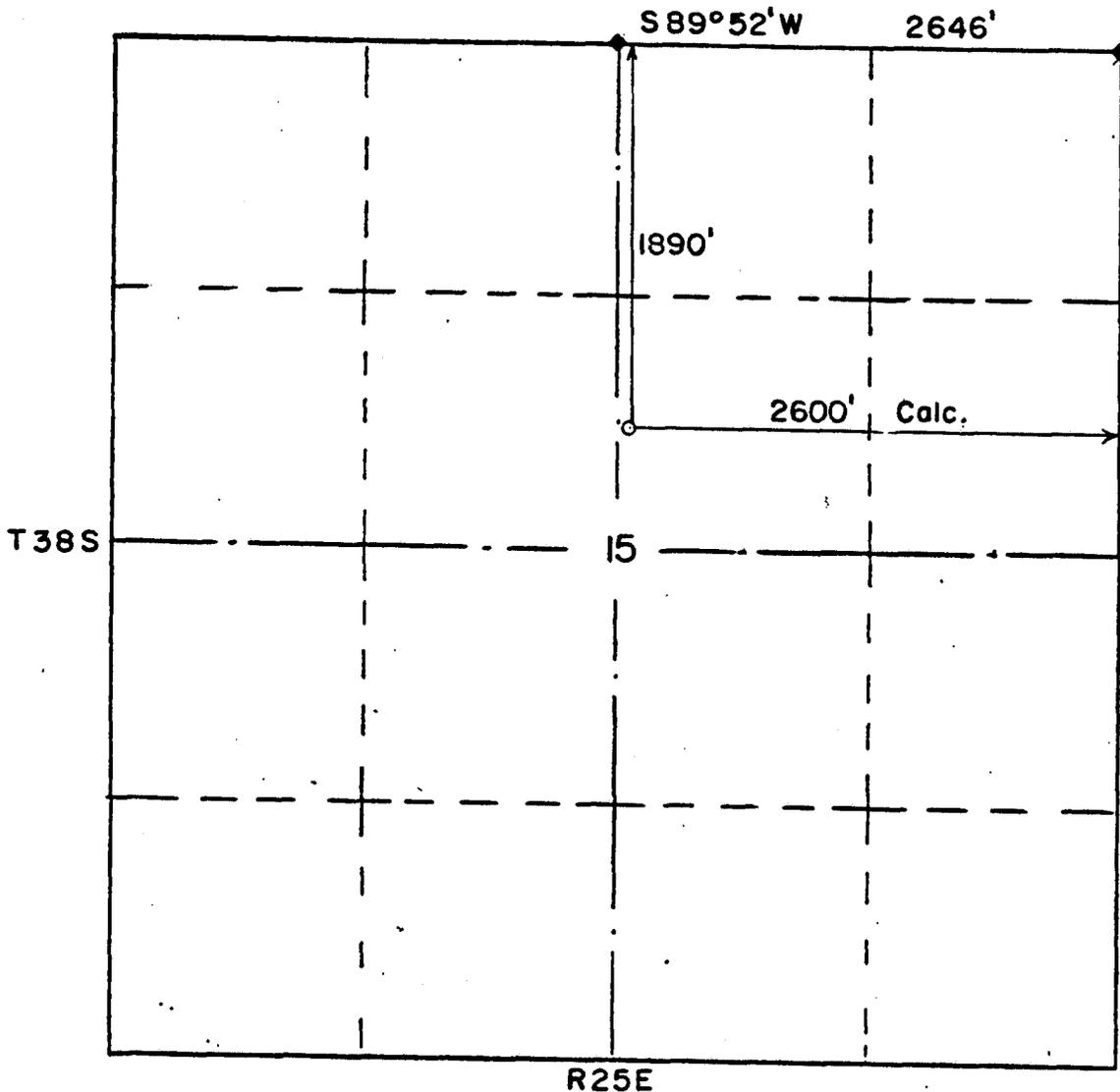
DATE 12-28-87

BY: *John R. Keller*

*See Instructions On Reverse Side

WELL SPACING: 265-3-3

WELL LOCATION AND ACREAGE DEDICATION PLAT



WELL LOCATION DESCRIPTION:
 BWAB, INC., Mackleshoot Federal #15-32
 1890'FN & 2600'FE, 5247' ground elevation
 Section 15, T.38 S., R.25 E., SLM
 San Juan County, Utah
 Alternate: 1150'FN & 2140'FE, 5271' grd..

The above plat is true and correct to my knowledge and belief.

16 November 1987

REGISTERED LAND SURVEYOR
 No. 5705
 GERALD G. HUDDLESTON
 Gerald G. Huddleston, LS
 STATE OF UTAH

WELL PAD PLAN VIEW

Well MACKLESHOOT FED. 15-32

1" = 60'

- 5265'

- 5260'

- 5255'

50'
35'

110'

- 5245'

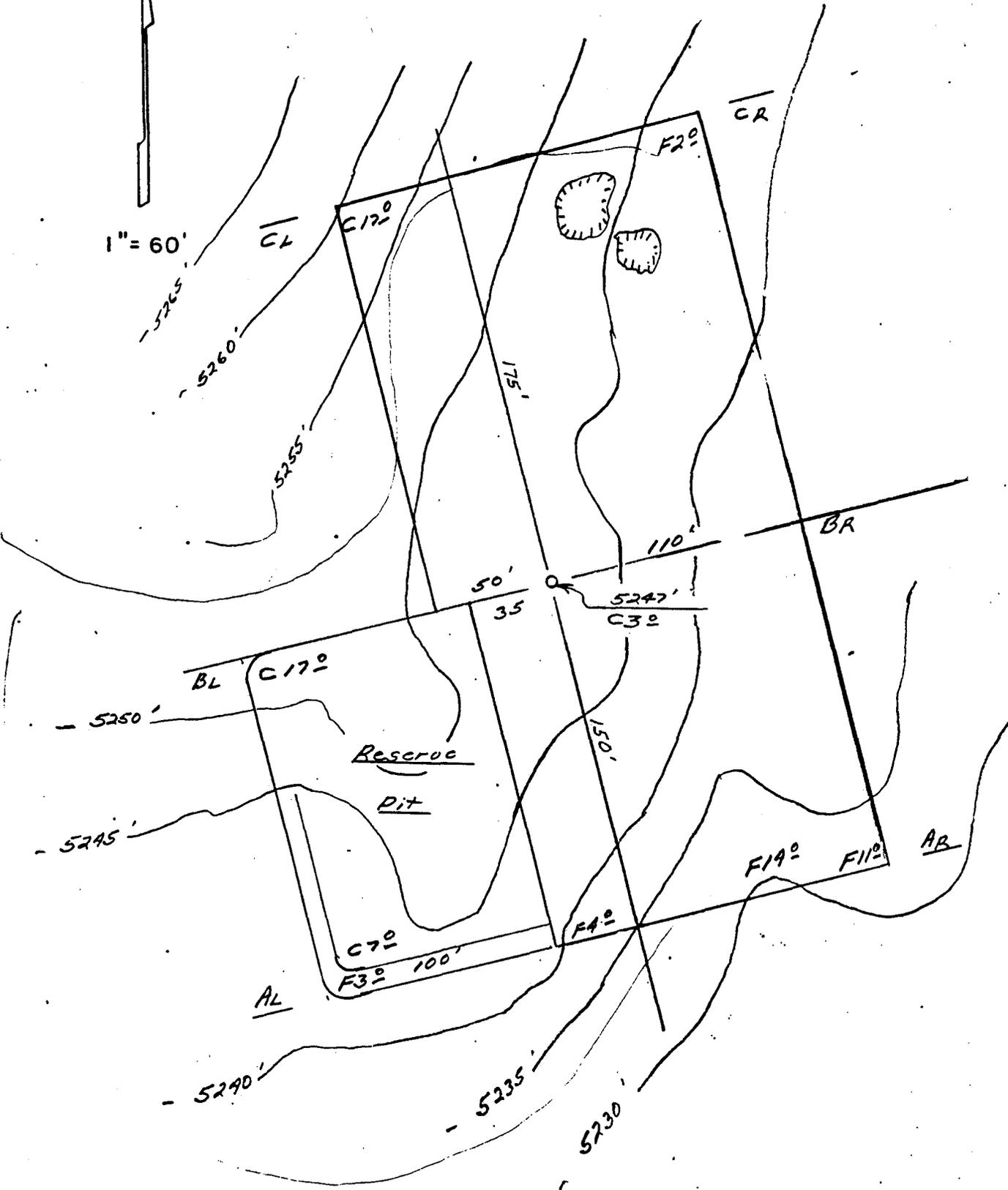
- 5250'

- 5245'

- 5240'

- 5235'

- 5230'

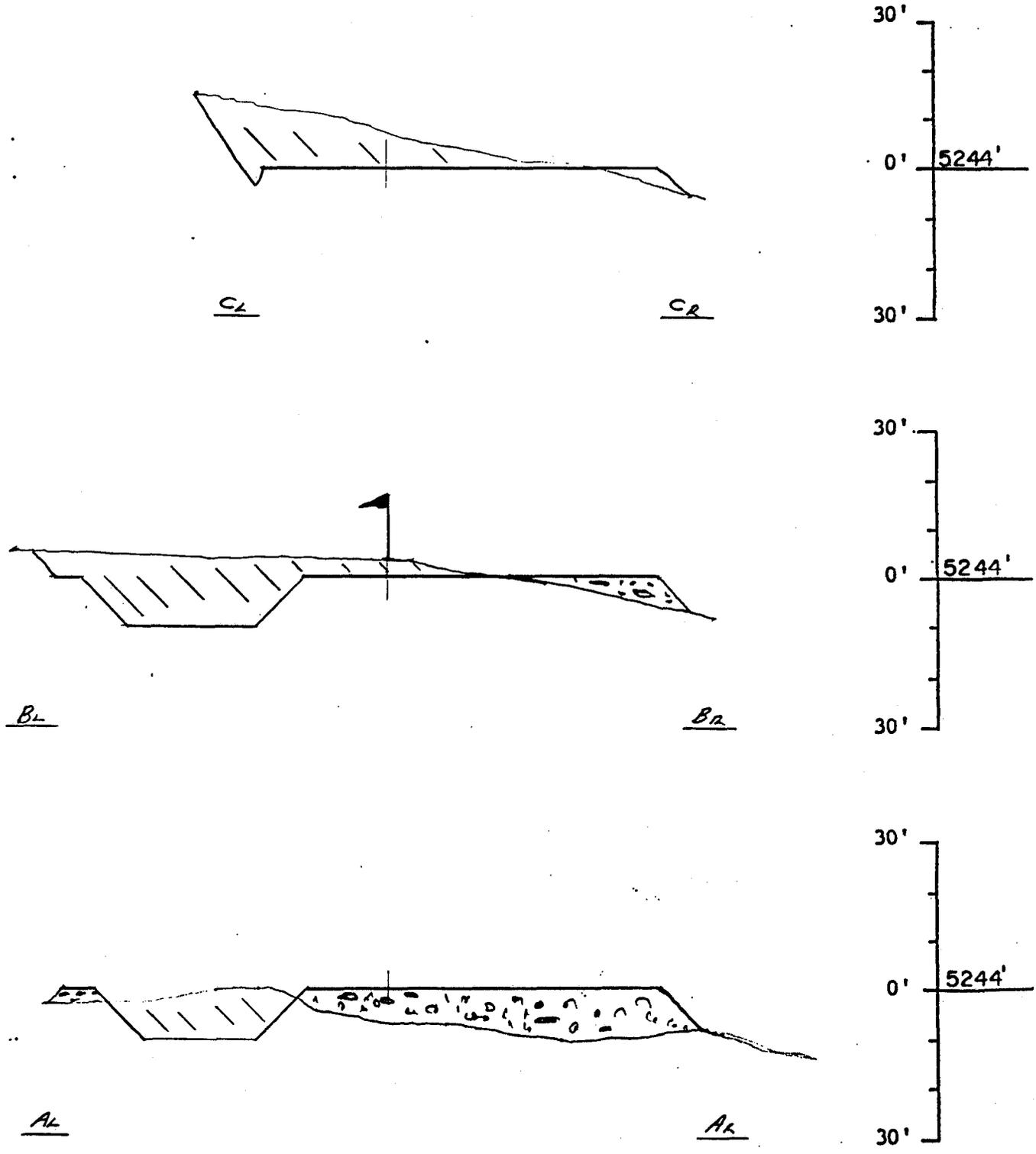


WELL PAD CROSS-SECTION

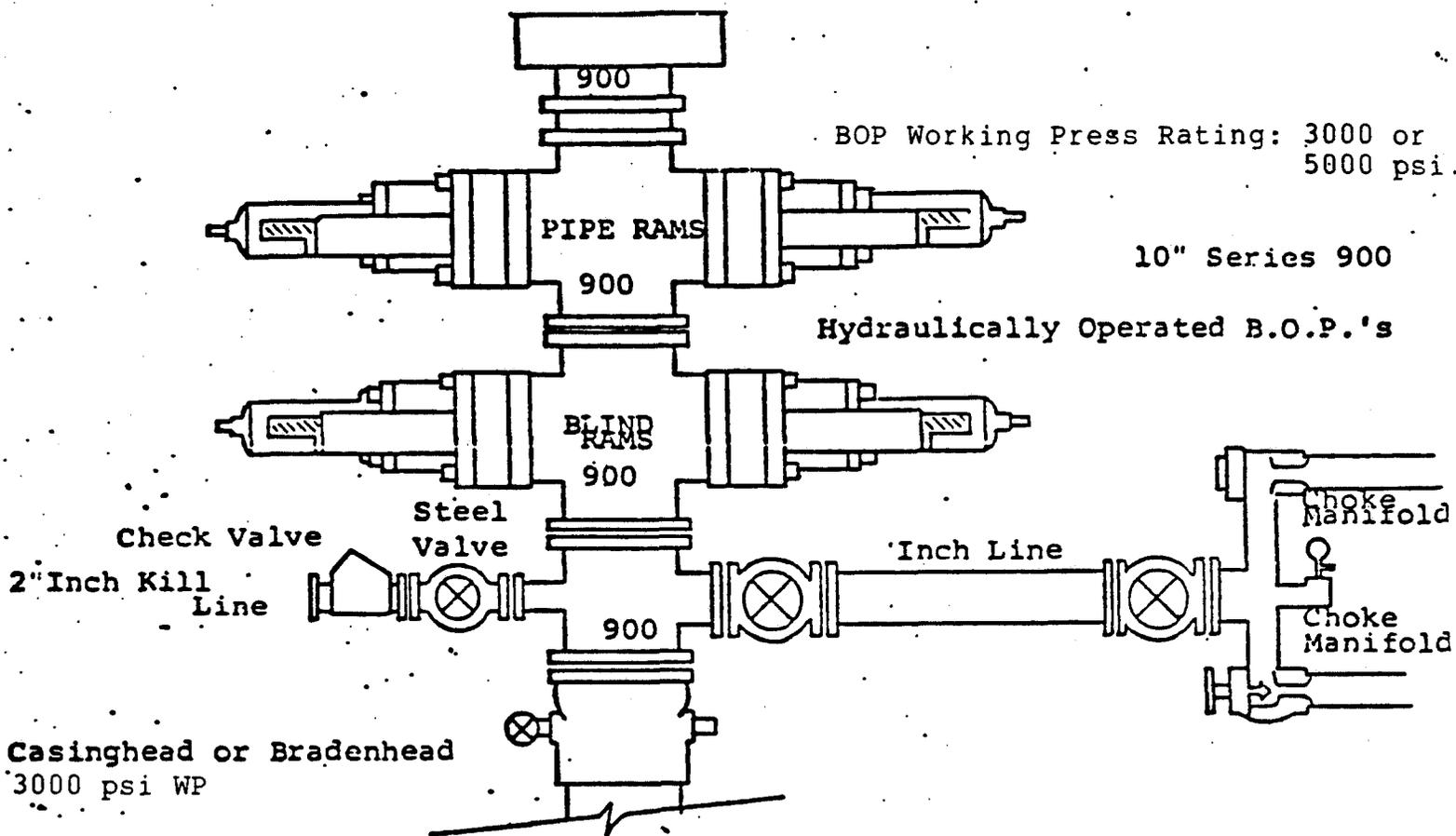
MACKLESHOOT FED 15-32

Cut 
Fill 

Scales: 1" = 60' H.
1" = 30' V.



BLOWOUT PREVENTOR LAYOUT



THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

1. All preventers to be hydraulically operated with secondary manual controls installed prior to drilling out from under casing.
2. Choke outlet to be a minimum of 1/2" diameter.
3. Kill line to be of all steel construction of 2" minimum diameter.
4. All connections from operating manifolds to preventers to be all steel. hole or tube a minimum of one inch in diameter.
5. The available closing pressure shall be at least 15% in excess of that required with sufficient volume to operate the B.O.P.'s.
6. All connections to and from preventer to have a pressure rating of 2000 psi or more. Max. surface shut-in press in area is 1000 psi.
7. BOP will be tested in accordance with APD stipulations.
8. Operating controls located a safe distance from the rig floor.
9. Hole must be kept filled on trips below intermediate casing.

PROPOSED DRILLING PLAN AND CONDITIONS
FOR DRILLING PERMIT APPROVAL

OPERATOR: BWAB Incorporated

WELL NAME: Muckleshoot Federal 15-32

SURFACE LOCATION: 2600 FEL and 1890 FNL
SWNE, Section 15, T38S-R25E
Lease No. U-47970

BOTTOMHOLE LOCATION: 2100' FEL and 1550' FNL
SWNE, Section 15, T38S-R25E
Lease No. U-47970

All lease and well operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Order No. 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

1. Surface Formation and Estimated Formation Tops:

<u>Formation</u>	<u>Depth</u>
Entrada	790
Navajo	990
Chinle	1,540
De Chelly	2,160
Cutler	2,790
Hermosa	4,490
Upper Ismay	5,480
Desert Creek	5,750
Akah	5,820
Total Depth	5,900

2. Estimated Depth at Which Oil, Gas, Water or Other Mineral Bearing Zones Are Expected to be Encountered:

	<u>Formation</u>	<u>Anticipated Depth</u>
Expected oil and associated gas zones:	Upper Ismay	5,490'
	Desert Creek	5,750'
Expected gas zones:	None	----
Expected mineral zones:	None	----
Expected fresh water zones:	Entrada	790'
	Navajo	990'
	Wingate	1,315'
Possible salt water flows:	De Chelly	2,160'
	Cutler	2,790'

Proposed Drilling Plan & Conditions

Page 2

All fresh water intervals will be cased off and cemented in a manner that will protect all fresh water aquifers.

3. Pressure Control Equipment:

The BOP stack will consist of a double ram hydraulically actuated BOP with a working pressure rating of 3,000 or 5,000 psi. An annular BOP or rotating head will probably not be used.

BOP systems will be consistent with API RP 53. Pressure tests will be conducted using the rig pump before drilling out from under all casing strings which are set and cemented in place. Blowout preventor controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and pipe rams operated, at least daily, to ensure good mechanical working order. This inspection will be recorded on the daily drilling report. Function of blind rams will be tested on trips. The San Juan Resource Area will be notified one (1) day before pressure testing of the surface shoe and BOP. The BOP stack will be tested using a test packer prior to drilling the Ismay Formation.

4. Casing Program and Auxiliary Equipment:

<u>Casing Size</u>	<u>Weight</u>	<u>Type</u>	<u>Setting Depths</u>	<u>TOC</u>
8-5/8"	24# or 32#	JorK-55	0 - 1,590'	Surface
5-1/2"	15.5# or 17#	JorK-55	0 - 5,900'	4300'

No special drilling equipment is expected to be necessary.

5. Mud Program and Circulating Medium:

<u>Hole Size</u>	<u>Interval</u>	<u>Type</u>	<u>Additives</u>	<u>Weight</u>	<u>Vis.</u>	<u>WL</u>
12-1/4"	0 - 1590	FWG	Lime/ASP700 Sweeps	10.0	35-40	NC
7-7/8"	1590-4290	FW	ASP700 Sweeps	8.4- 8.6	---	NC
7-7/8"	4290-5230	LSND	Staflor/Driscap /Barite	9.6-11.1	34-40	20 cc
7-7/8"	5230-5900	LSND	Caustic/Soda Ash /Desco	9.6-11.1	36-40	8-10 cc

6. Coring, Logging and Testing Program:

No coring is anticipated.

Standard mechanical packer drill stem tests may be run in the Ismay and Desert Creek if warranted.

A full GR-CNL-FDC and GR-DILL will be run across the Ismay-Desert Creek intervals. A GR-DILL will be run from the base of the surface casing.

Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted not later than thirty (30) days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analysis,

well-test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. If requested, prior to the commencement of drilling operations, samples (cuttings, fluids, and/or gases) will be submitted to the District Manager.

7. Abnormal Conditions, Bottom Hole Pressures and Potential Hazards:

Abnormal pressure is not anticipated in the Ismay or Desert Creek intervals; however, water flows in the De Chelly from 2160'-2790' are possible. Water flows may also occur in the Cutler Sands from 2790'-4490'. If water flows are encountered, a weight up of the mud system to 11.1 lbs/gallon may be necessary to control the flows.

The well will be directionally drilled from a surface location 2600' FEL and 1890' FNL of Section 15, T38S-R25E to a bottom hole location within a 75 foot radius of a point located 2100 FEL and 1550 FNL of Section 15. The bottomhole location will not be closer than 460' to the centerline of the section.

Lost circulation and other drilling problems are not anticipated.

Hydrogen sulfide gas is not anticipated.

8. Anticipated Starting Dates and Notifications of Operations:

The operator will contact the San Juan Resource Area at 801-587-2141, forty-eight (48) hours before beginning any dirt work.

No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the District Manager. If operations are to be suspended, prior approval of the District Manager will be obtained and notification given before resumption of operations.

The spud date will be reported orally to the San Juan Area Manager, a minimum of twenty-four (24) hours before spudding. A Sundry Notice (Form 3160-5) will be sent within twenty-four (24) hours after spudding, reporting the spud date and time. The Sundry will be sent to the District Manager. If the spudding is on a weekend or holiday, the Sundry will be submitted on the following regular work day.

In accordance with Onshore Oil and Gas Order No. 1, this well will be reported on Form 9-329 "Monthly Report of Operations", starting with the month in which operations begin and continue each month until the well is physically plugged and abandoned. This report will be sent to the BLM District Office, P.O. Box 970, Moab, Utah 84532.

Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported to the Resource Area in accordance with requirements of NTL-3A.

Proposed Drilling Plan & Conditions
Page 4

If a rig of a type uncommon to the area is utilized for drilling or completion, a Sundry Notice (Form 3160-5) to that effect will be filed, for prior approval of the District Manager. All conditions of this approved plan are applicable during all operations conducted with the replacement rig. In emergencies, verbal approval can be given by the District Petroleum Engineer.

If the well is successfully completed for production, the the District Manager will be notified when the well is placed in a producing status. Such notification will be through the filing of a Completion Report following the date on which the well is placed on production.

No well abandonment operations will begin without the prior approval of the District Manager. In the case of newly drilled dry holes or failures, and in emergencies, oral approval will be obtained from the District Petroleum Engineer. A "Subsequent Report of Abandonment" (Form 3160-5) will be filed with the District Manager, within thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration.

Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the San Juan Area Manager, or the appropriate surface manager.

Approval to vent/flare gas during initial well evaluation will be obtained from the District Office. This preliminary approval will not exceed thirty (30) days or 50 MMCF gas. Approval to vent/flare beyond this initial test period will require District Office approval pursuant to guidelines in NTL-4A.

Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR 3162.6. The following information will be permanently beaded-on with a welding torch: Fed, Well number, location by 1/4 1/4 section, township and range, Lease number. The type of marker to be utilized will be selected by the BLM after abandonment.

The BLM will be contacted prior to performing the following actions so they may witness them if they so desire.

1. The cementing and testing of surface casing, testing BOP's.
2. (Dry Hole) Setting and testing of surface casing shoe plug.

Notify the San Juan Resource area (Mike Wade) one day or on dry hole as soon as possible prior to the above at (801) 587-2141 (Home) (801) 587-2026 or if unable to reach Mike call Moab District office Steve Jones at (801) 259-6111.

1. EXISTING ROAD

See attached Regional and Topographic Maps

To reach the BWAB Incorporated Muckleshoot Federal #15-32 drilling location in the SWNE of Section 15, T38S-R25E, San Juan County, Utah, follow the directions below.

The location is approximately 16 miles southeast of Blanding, Utah. Proceed southerly out of Blanding, Utah on Utah State Highway 191 approximately 13 miles to its junction with Utah State Highway 262. From the intersection, turn east on Highway 262. Go east 8.5 miles on Highway 262. After approximately 8.5 miles, turn left onto Greater Indian Nation 5077. Go east on Greater Indian Nation 5077 6.7 miles to Hatch Trading Post. Just east of Hatch Trading Post, turn north on the county maintained paved road on the west side of Montezuma Creek. Go north on this road 9.2 miles to KOCH Hydrocarbon's Perkins Ranch Compressor Station. On the east side of the compressor station, turn east on an unmarked county maintained dirt road. Follow road east .5 miles and cross Montezuma Creek. Turn east on exploration road and follow it east southeast 4 miles to the location turnoff just north of the east side of Cliffhouse Butte. Turn south on newly improved trail, paralleling the Texaco and Wexpro-Celsius oil and gas pipelines. Follow road approximately .8 miles south and east into location. See attached topographic map for further details.

The Utah State highways mentioned above are bituminous surfaced roads and are maintained by the Utah State road crews. The county roads are maintained by San Juan County road crews, and the exploration roads mentioned above will be maintained by BWAB Incorporated.

The roads that are required for access during the drilling, completion and production phases of this well will be maintained to insure proper travel both entering and leaving the area. This will require some minor grader work and watering for maintaining of the road bed and dust control. Any work involving the county road will be coordinated with the San Juan County Road Department.

2. PLANNED ACCESS ROAD

See Topographic Map for routing of access over federal lands near wellsite.

The access road over federal lands will be a 20' crown road (10' either side of the centerline) after improvement. All but .2 miles of the road are existing county and state roads. Most of the road is Class "B" county maintained, approximately .8 miles falls on Federal surface and falls in the county Class "D" maintenance category and will probably have to be maintained by BWAB Inc. in cooperation with San Juan County. Maximum width of the construction area of disturbance will be 30'. Initial road construction will be limited to flat blading. The majority of the road is existing public access. Approximately .6 miles of road will require flat blading, and less than two-tenths of a mile will

be newly constructed road. The new road will be routed along a flased and approved right-of-way.

The grade along this road varies but is less than 10% over all the newly constructed road.

Approximately .8 mile of this road is on Federal surfaces; the majority of the road into the location is county or State of Utah maintained public roadway.

Culverts will be placed where necessary when the road is improved after production is established. The BLM will be consulted on the proper placement of water bars, turnouts and culverts. For exploration purposes, only a flat bladed road will be constructed. No grades in excess of 10% are expected on the entry road.

The Operator or his Contractor will contact the Surface Protection Specialist at the San Juan Resource Area Office in Monticello, Utah, phone (801) 587-2141, forty-eight (48) hours prior to beginning any work on public land.

The dirt contractor will be furnished with an approved copy of the surface use plan and any additional BLM stipulations prior to any work.

If subsurface cultural material is exposed during construction, work in that spot will stop immediately and the San Juan Resource Area Office will be contacted. All employees working in the area will be informed by the Operator that they will be subject to prosecution for disturbing archaeological sites or picking up artifacts. Salvage or excavation of identified archaeological sites will only be done if damage occurs.

If the Archaeological Study shows it necessary, a contract archeologist will be present when the dirt work on the access road commences to monitor the site for uncovered archeological material.

Improvement to the new and county road on federal lands will be necessary if production is established. The upgrading will conform to the Class III road standards, or county standards as appropriate, and will be completed within sixty (60) days after production is established and flowline and battery installation is complete. Upgrading is to be delayed so that the finally upgraded road and battery area will not be disturbed or damaged by facility installation.

New road construction on federal lands will be in conformance to the Class III road standards after production is established. All roads on federal lands will be upgraded with drainage dips (water dips) and tail ditches as specified by the BLM representative from the Resource Area. The centerline of the road is currently flased.

Trees will be piled along the side of the access road and topsoil will not be saved along the route.

Surface disturbance and vehicular travel will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.

Surfacing material will not be placed on the access road or location without prior BLM approval as to the type of material used.

3. EXISTING WELLS

There are four dry holes and no producing oil wells located within a one-mile radius of the subject drilling location. The locations of the dry holes are detailed in the paragraph below. They are also noted on Topographic Map.

4. LOCATION OF EXISTING AND PROPOSED FACILITIES

There are no producing wells within a one-mile radius of the proposed location.

At the present time, there is one gas transmission pipeline and one oil gathering line within a one-mile radius of the location. The gas line is owned by Wexpro Celcius and the oil pipeline by Texaco.

There are four dry holes within a one-mile radius of the location. They are the MCCR #1-10 Cliffhouse Federal, located in the SWSW of Section 10, T38S-R25E, San Juan County, Utah, the Total #1-15 Cliffhouse Buttes Federal located in the NWNW of Section 15, T38S-R25E, San Juan County, Utah, the Mobil No. 1-HH Federal located in the SENW of Section 15, T38S, R25E, San Juan County, UT, and the Midwest No. 1 Federal Tea Cup located in the SENW of Section 14, T38S, R25E, San Juan County, UT.

The site for and dikes for the proposed production facilities will be built using native materials. If these materials are not available or acceptable, then other arrangements will be made to acquire them from private sources. These facilities will be constructed using bulldozers, graders and workman crews to construct and place the proposed facilities.

The exact site of the tank battery will be determined after the well is drilled, but current plans call for placing the tank battery facility at an offsite location on the west side of pipeline right-of-way in close proximity to the access road. This site would be on BLM owned surface. Any battery constructed on such federal lands will be built and operated in compliance with federal regulations.

All permanent (on site for 6 months or longer) above ground facilities (including pump jacks) will be painted a flat, nonreflective, earthtone color to match the standard environmental colors, as determined by the Rocky Mountain 5-State Interagency committee. All facilities will be painted within 6 months of installation if weather permits. Facilities required to comply

with the Occupational Safety and Health Act (OSHA) will be excluded. The color will be desert beige.

If a tank battery is constructed on this lease, it will be surrounded by a dike of sufficient capacity to contain 1-1/2 times the storage capacity of the battery.

All loading lines will be placed inside the berm surrounding the tank battery.

All site security guidelines identified in 43 CFR 3162.7 regulations will be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed.

All off-lease storage, off-lease measurements, or commingling on-lease or off-lease will have prior written approval from the District Manager.

If the battery is located on the wellsite, the gas meter runs for the well will be located within 500 feet of the wellhead. The gas flowline will be buried from the wellhead to the meter and 500 feet downstream of the meter run or any production facilities. Meter runs will be housed and/or fenced. If the battery is located at a remote site, the gas meter will be located within 500 feet of the battery.

The oil and gas measurement facilities will be installed on the well location or at a remote site on federal land previously stated. The gas meters will be calibrated in place before any deliveries. Tests for meter accuracy will be conducted in accordance with contract provisions. The San Juan Area Manager will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be submitted to the San Juan Area Manager. All meter measurement facilities will conform with the API standards for liquid hydrocarbons and the AGA standard for natural gas measurement.

Rehabilitation of disturbed areas no longer needed for operations after construction is completed will meet the requirements of Item #10.

5. LOCATION AND TYPE OF WATER SUPPLY

Drilling water will be obtained from private ponds located on private lands on the Perkins Ranch in Section 12 of T38S-R24E. The water will be purchased from landowners and appropriate State of Utah permits obtained.

There will be no water well drilled at this location site.

If in the event water from the above mentioned source is not available, then other arrangements will be made and all concerned agencies will be notified.

Use of water from sources such as wells, springs, streams, or stock ponds for activities associated with this well will be approved, prior to use, by the agency or individual holding the water right (i.e. State of Utah).

6. SOURCE OF CONSTRUCTION MATERIALS

All construction material for this location site shall be borrow material accumulated during construction of the location site and access road. No additional road gravels or pit lining material from other sources are anticipated at this time, but if they are required, the appropriate actions will be taken to acquire them from private sources. The drillsite and the entry road is on BLM administered lands.

7. METHODS OF HANDLING WASTE DISPOSAL

See the attached Location Layout Sheet.

A reserve pit will be constructed to contain drilling cuttings, drilling water and drilling mud.

The reserve pit will be approximately 8' deep and at least one half of this depth shall be below the surface of the existing ground. The pit will be located, as shown on the attached plat, on the west side of the drilling location.

The reserve pit will be used during the drilling of this well to store non-flammable materials such as cuttings, drilling fluids if needed, chemicals and produced fluids, etc.

If deemed necessary by the agencies concerned to prevent contamination to surrounding areas, the reserve pits will be lined with native clay or other suitable liner material. At this time, it is not expected a liner will be necessary.

The pits will be surrounded by a three-strand barbed wire fence and over-head flassing will be installed to protect water fowl, wildlife and domestic animals if there is oil on the pits.

As stated in the aforementioned paragraphs, non-flammable materials such as cuttings and drilling fluids will be contained in the reserve pits.

At the conclusion of drilling, the reserve pit will be fenced on four sides. If livestock are present at the time drilling activities are commenced, it will be fenced on three sides, then fenced on the fourth side after rig moveout. The pit would then be allowed to dry completely prior to backfilling and other reclamation activities.

When the reserve pit dries and reclamation activities commence, the pits will be covered with a minimum of four feet of soil if practical and all requirements in Item #10 will be followed.

All produced water, if any, will be disposed of according to NTL-2B requirements.

All garbage and other waste material will be contained in a trash basket made of small mesh wire, or a pit covered with wire mesh, and all trash will be taken to the nearest sanitary landfill for disposal upon completion of the well.

A portable chemical toilet will be provided for human waste.

8. ANCILLARY FACILITIES

There are no ancillary facilities planned for at the present time and none foreseen in the near future.

9. WELL SITE LAYOUT

See the attached Location Layout Sheet.

The BLM District Office shall be notified before any construction begins on the proposed location site and road.

As previously mentioned in Item #7, the pits will be unlined unless it is determined by the representatives of the agencies involved that the materials are too porous and would cause contamination to the surrounding area; then the pits will be lined with native clay and any other type of material necessary to make them safe and tight.

When drilling activities commence, all work shall proceed in a neat and orderly sequence.

10. PLANS FOR RESTORATION OF SURFACE

The reserve pit and that portion of the location and access road not needed for production or production facilities will be reclaimed in the methods described in the rehabilitation section.

Adequate topsoil will be retained for final reclamation of the location where such topsoil exists. Any remaining stockpile of topsoil will be seeded in place using the prescribed seed mixture.

All above-ground production facilities will be painted with a flat, non-contrasting color harmonious with the adjacent landscape.

As there is little topsoil on the location site, due to existing natural conditions the top 2-3" of soil shall be stripped and stockpiled near the reserve pit where sufficient top soil exists to salvage. (See location layout sheet). When all drilling and production activities have been completed, the location site and access road will be reshaped to the original contour and stockpiled topsoil spread over the disturbed area.

Any drainages re-routed during construction activities shall be restored to their original line of flow as near as possible. Fences around pits are to be removed upon completion of drilling activities and all waste being contained in the pits shall be buried with a minimum of 4' of cover where practical.

As mentioned in Item #7, the reserve pits will be completely fenced with wire and overhead flassing installed if there is oil in the pits. The pits will be allowed to dry completely before covering. All items mentioned above will be completed within 90 days after commencement of restoration procedures if weather conditions permit.

When restoration activities have been completed, the location site and access ramp shall be reseeded with a seed mixture recommended by the BLM District Office when the moisture content of the soil is adequate for germination. The Lessee further agrees that all said clean-up and restoration activities shall be done and performed in a diligent and workman-like manner and in strict conformity with the above mentioned Items #7 and #10, and the Oil and Gas Surface Operating Standards Manual.

Immediately upon completion of drilling, the location and surrounding area will be cleared of all debris resulting from the operations. All trash will be hauled to a local sanitary landfill.

The Operator or his Contractor will contact the Surface Protection Specialist at the San Juan Resource Area BLM office in Monticello, Utah, phone (801) 587-2141, 48 hours prior to starting rehabilitation work that involves earthmoving equipment and upon completion of restoration measures.

Before any dirt work to restore the location takes place, the reserve pit must be completely dry and any trash (barrels, metal, etc.) it contains must be removed from public lands.

All disturbed areas will be recontoured to blend as nearly as possible with the surrounding area.

The stockpiled topsoil will be evenly distributed over the disturbed area.

All disturbed areas will be scarified with the contour to a depth of 12". Do not smooth pads, leave a roughened surface.

Seed will be (broadcast/drilled) at a time to be specified by the BLM with the attached seed prescription. When broadcast seeding, a harrow or some such implement will be dragged over the seeded area to assure seed cover.

1/2 lbs/acre Yellow sweet clover
2 lbs/acre Fourwing saltbush (*Atriplex canescens*)
6 lbs/acre Crested wheatgrass (*Asclepias scop. desertorum*)

After seeding is complete, the stockpiled trees will be scattered evenly over the disturbed areas and walked down with a dozer. The federal land access will be blocked to prevent any vehicle use.

Waterbars will be used on all sloping surfaces as shown below:

GRADE	SEACING
2%	200 feet spacings
2-4%	100 feet spacing
4-5%	75 feet spacings
+5%	50 feet spacings

11. SURFACE OWNERSHIP

Bureau of Land Management administered Federal Lands.

Mineral Ownership: Federal.

12. OTHER INFORMATION

The subject drillsite is located in an arid canyon land area used primarily for stock grazing near Nancy Patterson Canyon in San Juan County, Utah. There are no unusual plants or endangered animals known to be in the area, and the local ecosystem is not expected to be significantly impacted by this work, as the area has experienced considerable oil and gas activity in the immediate area over the last few years. The proposed activity will not make the area unsuitable for its current use.

There will be no change from the proposed drilling and/or workover program without prior approval from the District Manager. Safe drilling and operating practices must be used. All wells, whether drilling, producing, suspended or abandoned will be identified in accordance with 43 CFR 3162.2.

"Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3164.

The dirt contractor will be provided with an approved copy of the surface use plan.

If subsurface cultural materials are exposed during construction, work in that spot will stop immediately and the San Juan Resource Area Office will be contacted. All people who are in the area will be informed by the operator/holder that they are subject to prosecution for disturbing archaeological sites or picking up artifacts. Salvage or excavation of identified archaeological sites will be done by a BLM approved archaeologist only if damage occurs.

This permit will be valid for a period of one year from the date of approval. After permit termination, a new application will be filed for approval for any future operations.

The contact with the BLM District Office is Steve Jones, phone: (801) 259-6111, address: P. O. Box 970, Moab, Utah 84532.

The San Juan Resource Area Manager's address is P. O. Box 7, Monticello, Utah 84532. The contact is Richard McClure, phone: (801) 587-2141.

13. LESSEE'S OR OPERATOR'S REPRESENTATIVE

BWAB INCORPORATED
1801 California Street
Suite 1000
Denver, CO 80202

Mr. John R. Keller
(303) 295-7444
(303) 755-6181 (Home)

14. CERTIFICATION

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 operation proposed herein will be performed by BWAB INCORPORATED and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Date



John R. Keller
Production Superintendent
BWAB Incorporated

ON-SIIE

Conducted on November 16, 1987.

PARTICIPANTS:

John C. Masill
Richard McClure
Lowell Larson

BWAB Incorporated
BLM - San Juan Resource Center
Perry McDonald Construction

RECEIVED

SEP 28 1987

FILING FOR WATER IN THE STATE OF UTAH

Rec. by [Signature]
Fee Rec. 30.00
Receipt # 23342
Microfilmed
Roll # RECEIVED

BWAB INCORPORATED

NOV 30 1987

APPLICATION TO APPROPRIATE WATER SALT LAKE

TEMPORARY

For the purpose of acquiring the right to use a portion of the unappropriated water of the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of the Laws of Utah.

WATER RIGHTS PRICE

* WATER RIGHT NO. 09 - 1547 * APPLICATION NO. A T62981

1. *PRIORITY OF RIGHT: November 25, 1987 * FILING DATE: November 25, 1987

2. OWNER INFORMATION

Name(s): BWAB Incorporated * Interest: 100%
Address: 1801 California St., Suite 1000, Denver, CO 80202
City: Denver State: CO Zip Code: 80202
Is the land owned by the applicant? Yes No X
(If "No", please explain in EXPLANATORY section.)

3. QUANTITY OF WATER: cfs and/or 0.5 ac-ft

4. SOURCE: Ponds at Perkins Ranch * DRAINAGE:
which is tributary to
which is tributary to

POINT(S) OF DIVERSION: COUNTY: San Juan
Water will be trucked from ponds at the Perkins Ranch in Section 12 of T38S-R24E, San Juan County, UT.
N. 697 ft. & W. 2288 ft. from SE Cor. Sec. 12, T38S, R24E, SLB&M. Cajon Mesa Quad

Description of Diverting Works: Water to be hauled from ponds using licensed trucking
* COMMON DESCRIPTION: 8.5 miles North of Hatch Trading Post

5. POINT(S) OF REDIVERSION

The water will be rediverted from N/A at a point:
Description of Rediverting Works:

6. POINT(S) OF RETURN

The amount of water consumed will be - cfs or 0.5* ac-ft
The amount of water returned will be - cfs or 0 ac-ft
The water will be returned to the natural stream/source at a point(s):

7. STORAGE

Reservoir Name: Not named Temp. Earth Pit Storage Period: from Jan 1, 1987 to Feb. 15, 1987
Capacity: 1.8 ac-ft. Inundated Area: .23 acres
Height of dam: 8.0 feet
Legal description of inundated area by 40 acre tract(s): SWNE Sec. 15-T38S-R25E, San Juan Co., UT

*Most of the water will not be permanently removed from the ecosystem as it will evaporate and percolate from the reseve pit. Only about 1/3 of the .5 ac-ft will be lost to future use.
* These items are to be completed by the Division of Water Rights

Appropriate

8. List any other water right which will supplement this application _____

9. NATURE AND PERIOD OF USE

Irrigation:	From _____	to _____
Stockwatering:	From _____	to _____
Domestic:	From _____	to _____
Municipal:	From _____	to _____
Mining:	From _____	to _____
Power:	From _____	to _____
Other:	From <u>Dec. 15, 1987</u>	to <u>June 30, 1988</u>

10. PURPOSE AND EXTENT OF USE

Irrigation: _____ acres. Sole supply of _____ acres.
 Stockwatering (number and kind): _____
 Domestic: _____ Families and/or _____ Persons
 Municipal (name): _____
 Mining: _____ Mining District in the _____ Mine
 Ores mined: _____
 Power: Plant name: _____ Type: _____ Capacity: _____
 Other (describe): Drilling of Oil & Gas Well

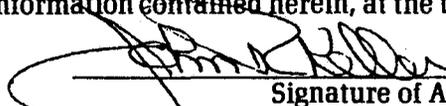
11. PLACE OF USE

Legal description of place of use by 40 acre tract(s): Sec. 15-T38S-R25E, San Juan Co., UT
SWNE
 Well to be drilled: Muckleshoot Federal #15-32.

12. EXPLANATORY

The following is set forth to define more clearly the full purpose of this application. (Use additional pages of same size if necessary): Closest available water that has sufficient quantity and quality to drill the well.

 The applicant(s) hereby acknowledges that he/she/they are a citizen(s) of the United States of America or intends to become such a citizen(s). The quantity of water sought to be appropriated is limited to that which can be beneficially used for the purposes herein described. The undersigned hereby acknowledges that even though he/she/they may have been assisted in the preparation of the above-numbered application through the courtesy of the employees of the Division of Water Rights, all responsibility for the accuracy of the information contained herein, at the time of filing, rests with the applicant(s).



 Signature of Applicant(s)
 John R. Keller
 Drilling & Production Manager

TEMPORARY

STATE ENGINEER'S ENDORSEMENT

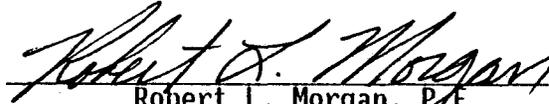
WATER RIGHT NUMBER: 09 - 1547

APPLICATION NO. T62981

1. November 25, 1987 Application received by MP.
 2. November 25, 1987 Application designated for APPROVAL by MP and KLJ.
 3. Comments:
-
-

Conditions:

This application is hereby APPROVED, dated December 1, 1987, subject to prior rights and this application will expire on December 1, 1988.


Robert L. Morgan, P.E.
State Engineer

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

DESIGNATION OF OPERATOR

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

STATE OFFICE: UTAH
SERIAL NO.: U-47970

and hereby designates

NAME: BWAB Incorporated
ADDRESS: 1801 California St., Suite 1000, Denver, CO 80202

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 authorized officer may serve written or oral instructions in securing compliance with the Operating Regulations (43 CFR 3160) with respect to (describe acreage to which this designation is applicable):

TOWNSHIP 38 SOUTH, RANGE 25 EAST
Section 15: E/2
San Juan Co., UT

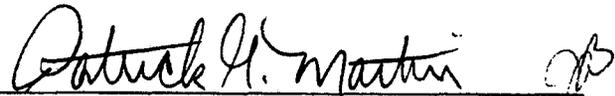
Bond coverage under 43 CFR 3104 for lease activities conducted by the above named designated operator is under Bond Number 803F0254.

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, stipulations, or orders of the Secretary of the Interior or his representative.

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

BHP Petroleum (Americas) Inc.



(Signature of lessee)

Patrick G. Martin, Attorney-in-Fact
5613 DTC Parkway, #600
Englewood, CO 80111

(Address)

November 23, 1987

(Date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

DESIGNATION OF OPERATOR

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

STATE OFFICE: Utah
SERIAL NO.: U-47970

and hereby designates

NAME: BWAB Incorporated
ADDRESS: 1801 California St., Suite 1000, Denver, CO 80202

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 authorized officer may serve written or oral instructions in securing compliance with the Operating Regulations (43 CFR 3160) with respect to (describe acreage to which this designation is applicable):

TOWNSHIP 38 SOUTH, RANGE 25 EAST
Section 15: ~~EXX~~ NE4
San Juan Co., UT

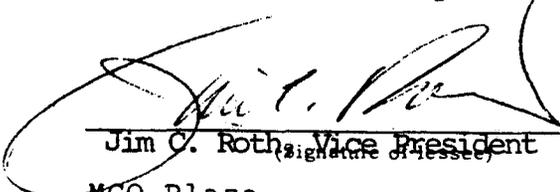
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In case of default on the part of the designated operator, the lessee will make full and prompt compliance with all regulations, lease terms, stipulations, or orders of the Secretary of the Interior or his representative.

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

MCOR Oil & Gas Corporation


Jim C. Roth, Vice President
(Signature of Lessee)

MCO Plaza
5718 Westheimer
Houston, TX 77057
(Address)

11/19/87

(Date)

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

14813-091

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

DESIGNATION OF OPERATOR

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

STATE OFFICE: Utah
SERIAL NO.: U-47970

and hereby designates

NAME: BWAB Incorporated
ADDRESS: 1801 California St., Suite 1000, Denver, CO 80202

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 authorized officer may serve written or oral instructions in securing compliance with the Operating Regulations (43 CFR 3160) with respect to (describe acreage to which this designation is applicable):

TOWNSHIP 38 SOUTH, RANGE 25 EAST
Section 15: E/2
San Juan Co., UT

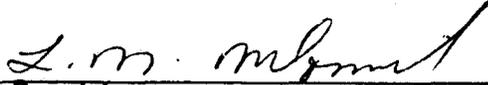
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The lessee agrees promptly to notify the authorized officer of any change in the designated operator.

Total Petroleum Inc.



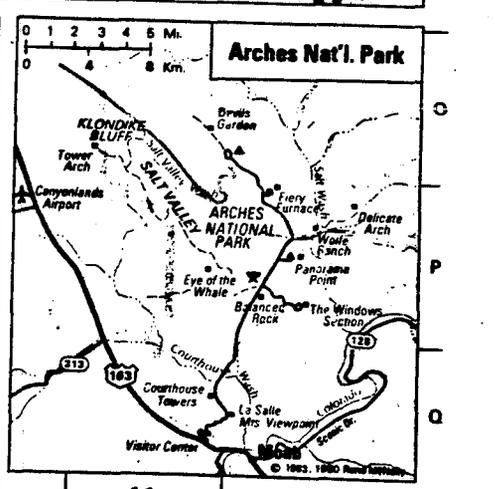
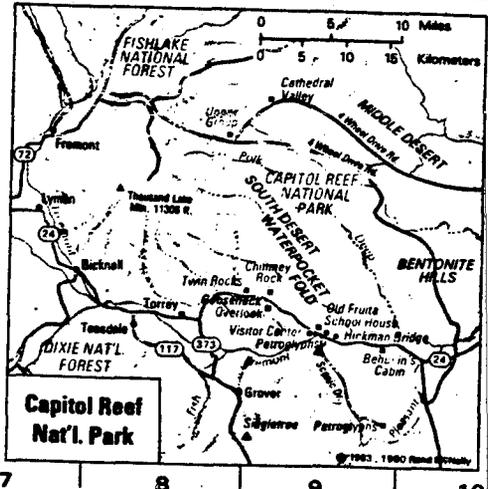
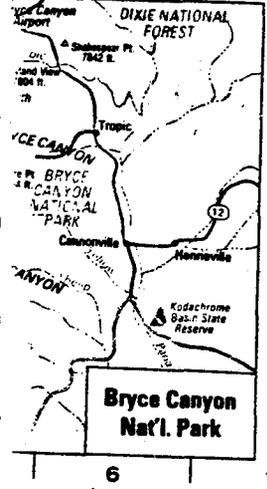
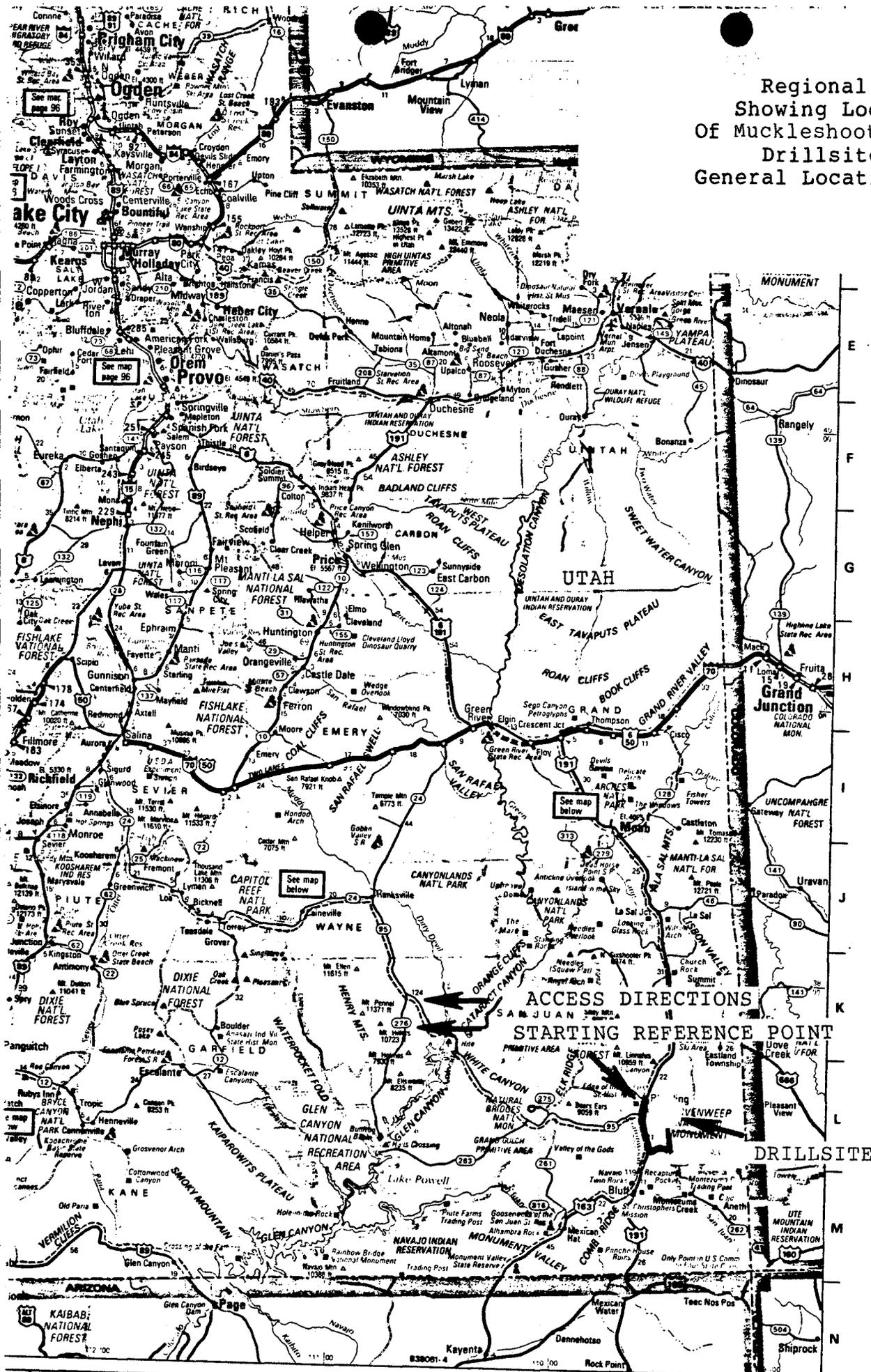
L. M. McCormick (Signature of lessee)
Vice President
One Allen Center, #2950
Houston, TX 77002

NOVEMBER 19, 1987

(Date)

(Address)

Regional Map
 Showing Location
 Of Muckleshoot Federal #15-32
 Drillsite And
 General Location Access



6

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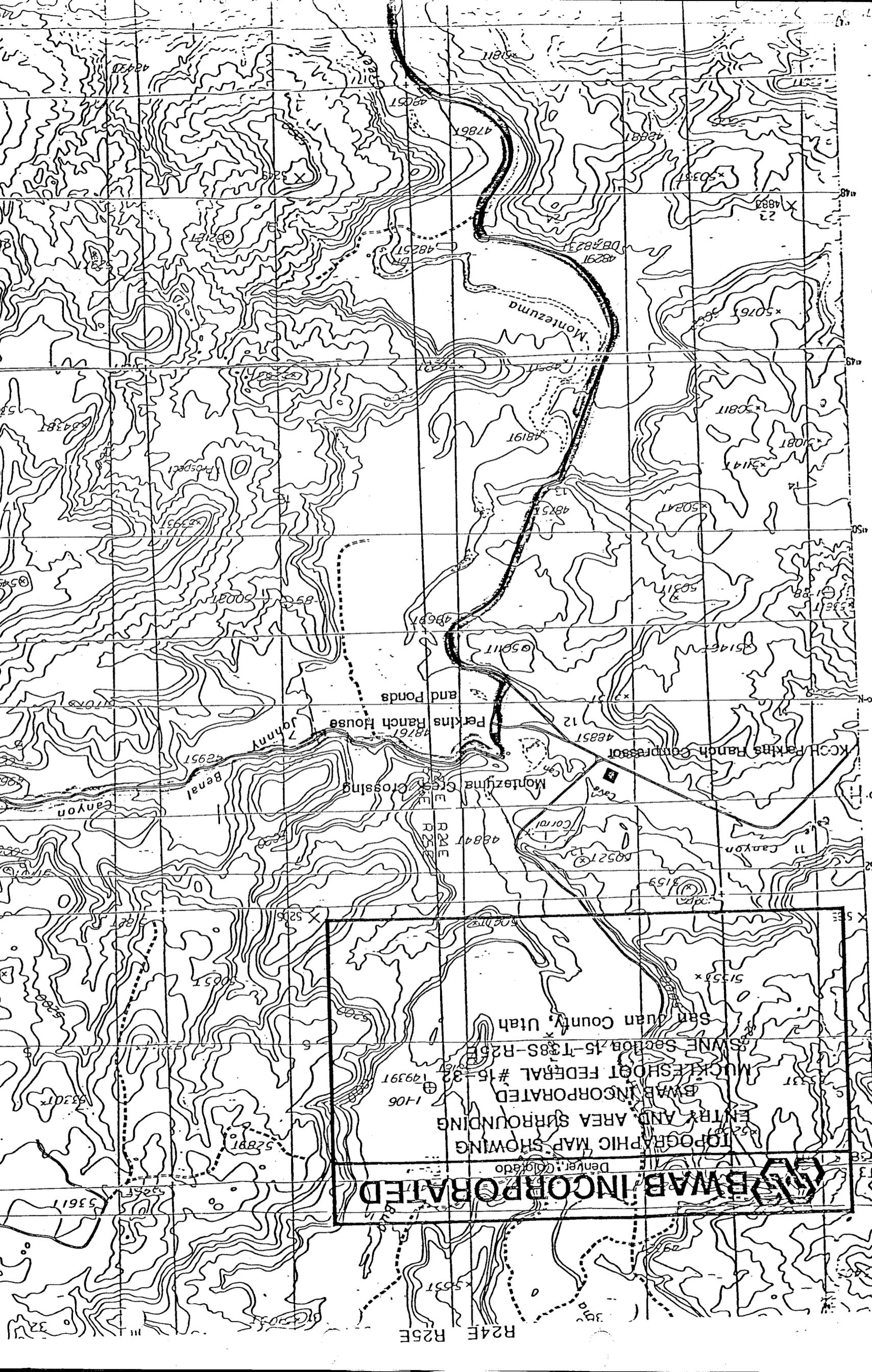
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BWA INCORPORATED

Denver, Colorado

TOPOGRAPHIC MAP SHOWING
ENTRY AND AREA SURROUNDING

BWA INCORPORATED

MUCKLESHOOT FEDERAL #15-32

SWNE Section 15-138S-R25E

San Juan County, Utah

R24E R25E

S3E

Perkins Ranch House
and Ponds
Montezuma Creek Crossing
Benal Canyon
Perkins Ranch Compressor
Montezuma

Montezuma

Montezuma

123035

OPERATOR BWB Inc DATE 12-11-87

WELL NAME Muckleshoot Fed. 15-32

SEC SWNE 15 T 38S R 2SE COUNTY San Juan

43-037-31380
API NUMBER

Fed.
TYPE OF LEASE

CHECK OFF:

PLAT

BOND

NEAREST WELL

LEASE

FIELD

POTASH OR OIL SHALE

PROCESSING COMMENTS:

No other well in Sec. 15.
Need water permit
Exception rec'd 12/23/87

APPROVAL LETTER:

SPACING: R615-2-3 _____ UNIT _____ R615-3-2

_____ CAUSE NO. & DATE _____ R615-3-3

STIPULATIONS:

1- Water

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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 MULTIPLE ZONE

2. NAME OF OPERATOR
 BWAB Incorporated

3. ADDRESS OF OPERATOR
 1801 California St., Suite 1000, Denver, CO 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
 At surface: 2600' FEL & 1890' FNL SWNE
 At proposed prod. zone: Within 75' radius of 2100' FEL & 1550' FNL SWNE

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 16 miles SE of Blanding, Utah

10. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) 540'

16. NO. OF ACRES IN LEASE 640

17. NO. OF ACRES ASSIGNED TO THIS WELL 40

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

19. PROPOSED DEPTH 5,900'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 5247' GL

22. APPROX. DATE WORK WILL START* 12/15/87

5. LEASE DESIGNATION AND SERIAL NO.
 U-47970

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
 Muckleshoot Federal

9. WELL NO.
 #15-32

10. FIELD AND POOL, OR WILDCAT
 Undesignated

11. SEC. T., R., M., OR BLK. AND SURVEY OR AREA
 Sec. 15-T38S-R25E

12. COUNTY OR PARISH
 San Juan

13. STATE
 UT

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	24# or 32#	1590'	610 sxs - Circ to surface
7-7/8"	5-1/2"	15.5# or 17#	5900'	250 sxs

1. Notify BLM 24 hrs prior to spud.
2. Drill to 1590'. Set 8-5/8" surface pipe cemented to surface.
3. Pressure test BOP and surface casing.
4. Directionally drill to 5900' TD and test the productivity of the Ismay and Desert Creek Formations.
5. Plug as per B M instructions or run production casing as appropriate. Cement production string to approximately 4300'.

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 John R. Ketter TITLE Drlg & Prod Manager DATE 11/20/87
 (This space for Federal or State office use)

PERMIT NO. 7/S/ GENE NODINE APPROVAL DATE _____
 APPROVED BY _____ TITLE DISTRICT MANAGER DATE DEC 07 1987

FLARING OR VENTING OF GAS IS SUBJECT OF NTL 4-A DATED 1/1/80

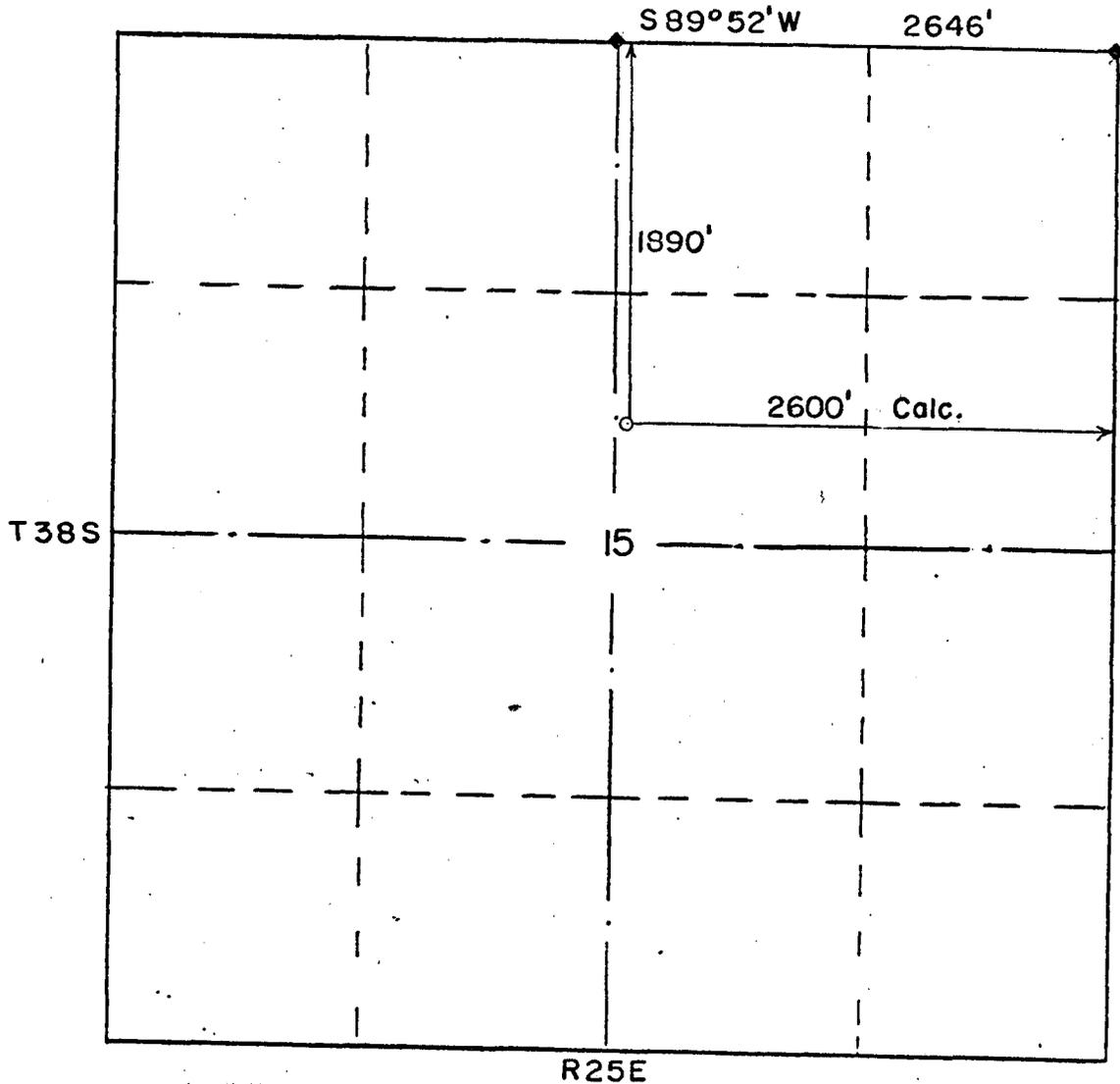
CONDITIONS OF APPROVAL ATTACHED

*See Instructions On Reverse Side

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

STATE OF UTAH
 DOGIR

WELL LOCATION AND ACREAGE DEDICATION PLAT



1"=1000'

◆ brass cap

WELL LOCATION DESCRIPTION:

BWAB, INC., Mackleshoot Federal #15-32

1890'FN & 2600'FE, 5247' ground elevation

Section 15, T.38 S., R.25 E., SLM

San Juan County, Utah

Alternate: 1150'FN & 2140'FE, 5271' grd..

The above plat is true and correct to my knowledge and belief.

16 November 1987

REGISTERED LAND SURVEYOR
No. 5705
GERALD G. HUDDLESTON
Gerald G. Huddleston
Gerald G. Huddleston, LS
STATE OF UTAH

BWAB Incorporated
Well No. Muckleshoot Federal 15-32
Sec. 15, T. 38 S., R. 25 E.
San Juan County, Utah
Lease U-47970

CONDITIONS OF APPROVAL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

BWAB Incorporated is the bonded entity on this application. Liability will remain with the bonded party named above until we are formally notified by letter of the new bonded entity in reference to this Application for Permit to Drill.

B. SURFACE USE PLAN

If at any time the facilities located on public lands authorized by the terms of the lease are no longer included in the lease (due to a contraction in the unit or other lease or unit boundary change), the BLM will process a change in authorization to the appropriate statute. The authorization will be subject to appropriate rental, or other financial obligation determined by the authorized officer.

NOTIFICATIONS

Notify the San Juan Resource Area, at (801) 587-2141 for the following:

2 days prior to commencement of dirt work, construction or reclamation;

1 day prior to spudding;

~~1 day prior to commencement of drilling and cementing of surface casing~~

~~1 day prior to commencement of drilling of BOPB and/or surface casing~~

Notify the Moab District Office, Branch of Fluid Minerals at (801) 259-6111 for the following:

No well abandonment operations will be commenced without the prior approval of the District Manager. In the case of newly drilled dry holes, and in emergency situations, verbal approval can be obtained by calling the following individuals, in the order listed:

Dale Manchester, Petroleum Engineer Office Phone: (801) 259-6111

Home Phone: (801) 259-6038

Lynn Jackson, Chief, Branch of Fluid Minerals

Office Phone: (801) 259-6111

Home Phone: (801) 259-7990

Paul Brown, I&E Coordinator

Office Phone: (801) 259-6111

Home Phone: (801) 259-7018

24 hours advance notice is required for all abandonments.

BWAB INCORPORATED



December 21, 1987

State of Utah
Division of Oil, Gas & Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, UT 84180 - 1203

RECEIVED
DEC 23 1987

DIVISION OF
OIL, GAS & MINING

ATTENTION: Mr. John Baza

RE: Muckleshoot Federal #15-32
SWNE Sec. 15-T38S-R25E
San Juan Co., UT
Supplement to Drilling Permit Application

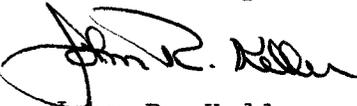
Dear Sir:

BWAB Incorporated proposes to drill the Muckleshoot Federal #15-32 a directional hole from an exception surface location to an exception downhole location. The primary objective of this exploratory test, the Upper Ismay member of the Paradox formation, is an algal mound which is lenticular and relatively narrow. The mound is identifiable on a reflection seismic profile and runs just north of the subject drillsite. The drilling of the proposed well at a surface location within the 400 foot "window" is not acceptable due to geologic and topographic constraints. The bottom hole location specified in the permit is a high point on the mound and is therefore geologically preferable. A surface location at this point is not buildable due to the presence of a large drainage. BWAB Incorporated controls all of the acreage within 540 feet or more of the proposed downhole location. The bottom hole location of this well will be no closer than 465' to the lease line.

If you should have any questions in this regard, please do not hesitate to contact the undersigned at the letterhead address or telephone number.

Respectfully,

BWAB Incorporated


John R. Keller
Drilling & Production Manager



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

December 28, 1987

BWAB Incorporated
1801 California Street, Suite 1000
Denver, Colorado 80202

Gentlemen:

Re: Muckleshoot Federal 15-32 - SW NE Sec. 15, T. 38S, R. 25E
(Surf.) 1890' FNL, 2600' FEL - (BHL) Approx. 1550' FNL, 2100' FEL
San Juan County, Utah

Approval to drill the referenced well is hereby granted in accordance with Rule R615-3-3, Oil and Gas Conservation General Rules, subject to the following stipulations:

1. Prior to commencement of drilling, receipt by the Division of evidence providing assurance of an adequate and approved supply of water as required by Chapter 3, Title 73, Utah Code Annotated.

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

1. Spudding notification to the Division within 24 hours after drilling operations commence.
2. Submittal of an Entity Action Form to the Division within five working days of the time that the well is spudded or a change in operations or interests necessitates a change in entity status.
3. Submittal to the Division of completed Form OGC-8-X, Report of Water Encountered During Drilling.
4. Prompt notification to the Division should you determine that it is necessary to plug and abandon this well. Notify John R. Baza, Petroleum Engineer, (Office) (801) 538-5340, (Home) 298-7695, or R. J. Firth, Associate Director, (Home) 571-6068.

Page 2
BWAB Incorporated
Muckleshoot Federal 15-32
December 28, 1987

5. Compliance with the requirements of Rule R615-3-22, Gas Flaring or Venting, Oil and Gas Conservation General Rules.
6. Prior to commencement of the proposed drilling operations, plans for toilet facilities and the disposal of sanitary waste at the drill site shall be submitted to the local health department having jurisdiction. Any such drilling operations and any subsequent well operations must be conducted in accordance with applicable state and local health department regulations. A list of all local health departments and copies of applicable regulations are available from the Division of Environmental Health, Bureau of General Sanitation, telephone (801) 538-6121.
7. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-037-31380.

Sincerely,



R. J. Firth
Associate Director, Oil & Gas

as
Enclosures
cc: Branch of Fluid Minerals
D. R. Nielson
8159T

011218

DIVISION OF OIL, GAS AND MINING

Orl.

SPODDING INFORMATION

API #43-037-31380

NAME OF COMPANY: BWAB

WELL NAME: MUCKLESHOOT FEDERAL 15-32

SECTION SW NE 15 TOWNSHIP 38S RANGE 25E COUNTY San Juan

DRILLING CONTRACTOR Parker

RIG # _____

SPODDED: DATE 1-8-88

TIME _____

How Air Drilled

DRILLING WILL COMMENCE Approx. 1-12-88 - Coleman, Rig #4

REPORTED BY Cari Sullivan

TELEPHONE # _____

DATE 1-8-88 SIGNED _____ AS _____

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

5. LEASE DESIGNATION AND SERIAL NO.	U-47970 <i>Orl-</i>
6. IF INDIAN, ALLOTTEE OR TRIBE NAME	012009
7. UNIT AGREEMENT NAME	
8. FARM OR LEASE NAME	Muckleshoot Federal
9. WELL NO.	15-32
10. FIELD AND POOL, OR WILDCAT	Undesignated
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA	Sec. 15-T38S-R25E
12. COUNTY OR PARISH	San Juan
13. STATE	UT

RECEIVED
JAN 12 1986
DIVISION OF OIL, GAS & MINING
80202

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
BWAB Incorporated

3. ADDRESS OF OPERATOR
1801 California St., Suite 1000, Denver, CO

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface
SWNE 2600' FEL & 1890' FNL

14. PERMIT NO.
API #43-037-31380

15. ELEVATIONS (Show whether OF, RT, GR, etc.)
5247' GL

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) <input type="checkbox"/>	

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

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

NOTIFICATION OF SPUD:

80' of 16" conductor set on 1/10/88 by Parker
Air Drilling, Cemented conductor to surface.

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

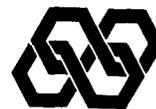
SIGNED *John R. Keller* TITLE Drilling & Prod. Manager DATE 1/11/88
John R. Keller

(This space for Federal or State office use)

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

BWAB INCORPORATED

RECEIVED
JAN 20 1988



January 18, 1988

DIVISION OF
OIL, GAS & MINING

State of Utah
Division of Oil, Gas & Mining
355 W. North Temple
3 Triad Center, Suite 350
Salt Lake City, UT 84180-1203

Orl.
43-037-31380

ATTENTION: JOHN BAZA

RE: Muckleshoot Federal #15-32
SWNE Sec. 15-T38S-R25E
San Juan Co., UT

Dear Sir:

Enclosed herewith is one (1) original and two (2) copies of our Sundry Notice regarding the spudding of the above captioned well. Also enclosed is one (1) original and one (1) copy of our Entity Action Form. If you should have any questions in this regard, please do not hesitate to contact the undersigned.

Very truly yours,

BWAB Incorporated

Carrie M. Sullivan

Carrie M. Sullivan

:CMS

Enclosure (5)

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

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.)

JAN 20 1988

5. LEASE DESIGNATION AND SERIAL NO.
U-47970 *Drl.*

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
012504

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Muckleshoot Fed.

9. WELL NO.
#15-32

10. FIELD AND POOL, OR WILDCAT
Undesignated

11. SEC., T., R., M., OR BLK. AND SURVEY OR ASSA
Sec. 15-T38S-R25E

12. COUNTY OR PARISH 13. STATE
San Juan UT

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
BWAB Incorporated

3. ADDRESS OF OPERATOR
1801 California St., Suite 1000, Denver, CO 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
SWNE 2600' FEL & 1890' FNL

14. PERMIT NO.
API No. 43-037-31380

15. ELEVATIONS (Show whether OF, RT, OR, etc.)
5247' GL

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"/>	FULL 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) <input type="checkbox"/>	(Other) <input type="checkbox"/>

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

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

NOTIFICATION OF SPUD:

Coleman Rig #4 spud 12-1/4" hole on this well at 7:30 pm January 16, 1988.

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

SIGNED John R. Keller TITLE Drlg. & Prod. Mgr. DATE 01/18/88

(This space for Federal or State office use)

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

Dr.
43-037-31380

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
3 TRIAD CENTER, SUITE 350
SALT LAKE CITY, UT 84180-1203

021202

REPORT OF WATER ENCOUNTERED DURING DRILLING

Well Name & Number Muckleshoot Federal #15-32
Operator BWAB Incorporated Address 1801 California St., Suite 1000
Denver, CO 80202
Contractor Coleman Rig #4 Address P.O. Drawer 3337, Farmington, NM
87499
Location SW 1/4 NE 1/4 Sec. 15 T. 38S R. 25E County San Juan

Water Sands

	<u>Depth</u>		<u>Volume</u>	<u>Quality</u>
	From	To	Flow Rate or Head	Fresh or Salty
1.	3168'		Unable to determine	Brackish
2.				
3.				
4.				
5.				

(Continue on reverse side if necessary)

Formation Tops Upper Ismay MD-5560', TVD-5498', Hovenweep MD-5702', TVD-5636'
Lower Ismay MD-5742', TVD-5676', Gothic Shale MD-5792', TVD-5731',
Desert Creek MD-5812', TVD-5751', Akah MD-5908', TVD-5846'
Remarks

- NOTE: (a) Report on this form as provided for in Rule 806, Oil and Gas Conservation General Rules.
- (b) If a water analysis has been made of the above reported zone, please forward a copy along with this form.

BWAB INCORPORATED



February 9, 1988

State of Utah
Department of Natural Resources
Division of Oil, Gas & Mining
3 Triad Center, Suite 350
Salt Lake City, UT 84180-1203

RECEIVED
FEB 11 1988

RE: Muckleshoot Federal #15-32
SWNE Sec. 15-T38S-R25E
San Juan Co., UT

DIVISION OF
OIL, GAS & MINING

Gentlemen:

Enclosed herewith is our Report Or Water Encountered During Drilling for the above captioned well. If you have any questions in this regard, please do not hesitate to contact the undersigned.

Very truly yours,

BWAB Incorporated

Carrie M. Sullivan

Carrie M. Sullivan

:CMS

Enclosure

DOWELL SCHLUMBERGER INCORPORATED

CUSTOMER

OILFIELD SERVICES
MINING SERVICES
INDUSTRIAL SERVICES

DSI SERVICE ORDER, RECEIPT, AND INVOICE NO.
1569-1831

CORRESPONDENCE:
P.O. BOX 4378
HOUSTON, TEXAS 77210

REMITTANCE:
P.O. BOX 100344
HOUSTON, TEXAS 77210

DSI SERVICE LOCATION NAME AND NUMBER
COLORADO 15-69

CUSTOMER'S NAME: **BWAB INC**
ADDRESS: _____
CITY, STATE AND ZIP CODE: _____

RECEIVED
FEB 16 1988

TYPE SERVICE CODE: **275**
BUSINESS CODES: _____
WORKOVER W
NEW WELL N
OTHER O

API OR IC NUMBER: _____
IMPORTANT
SEE OTHER SIDE FOR TERMS & CONDITIONS

ARRIVE LOCATION: MO. **1** DAY **9** YR. **88** TIME **1500**

SERVICE ORDER I authorize work to begin per service instructions in accordance with terms and conditions printed on the reverse side of this form and represent that I have authority to accept and sign this order.

CUSTOMER AUTHORIZED AGENT
X Dwight Paul

JOB COMPLETION: MO. **1** DAY **9** YR. **88** TIME **1620**

SERVICE RECEIPT I certify that the materials and services listed were received and all services performed in a workmanlike manner.

CUSTOMER AUTHORIZED AGENT
Dwight Paul

SHIPPED VIA **DOWELL SCHLUMBERGER**

DSI shall furnish and Customer shall purchase materials and services required in the performance of the following SERVICE INSTRUCTIONS or DSI INDUSTRIAL SERVICE CONTRACT NO. _____

FURNISH MATERIALS & EQUIPMENT TO CEMENT 80 FT. 16" CONDUCTOR USING 200 SCS. CLASS B + 3% SI, AS PER CUSTOMER'S INSTRUCTIONS.

STATE: **UTAH** CODE: _____ COUNTY / PARISH: **SAN JUAN** CODE: _____ CITY: _____

WELL NAME AND NUMBER / JOB SITE: **MUCKLESHOOT FEDERAL # 15-32** LOCATION AND POOL / PLANT ADDRESS: **SEC. 15 T385 R2SE**

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
DABZ09 - 000	EQUIPMENT DEPTH CHARGE TO 80'	EA.	1	575.00	575.00
DS9200 - 001	MILEAGE ON PUMPER @ 57 MILES	MILE	57	2.20	125.40
040002 - 000	D902 CLASS B CEMENT	SACK	200	7.35	1,470.00
067005 - 100	51 CALCIUM CHLORIDE	LB.	564	0.30	169.20
D49102 - 000	TRANSPORTATION - DELIVERY CHARGE 9.68 TONS X 57 MI. = 552 T-M	T-M	552	0.75	414.00
D49100 - 000	SERVICE CHARGE	FT. ³	211	0.95	200.45
00006 - 001	CONFIRM TO BID - EQUIPMENT	%	33		<433.90>
00006 - 002	CONFIRM TO BID - MATERIALS	%	33		<540.94>

THANK YOU FOR USING
DOWELL SCHLUMBERGER!

RECEIVED

BOOK PRICE: \$ 2954.05 DISCOUNTED FIELD ESTIMATE: \$ 1979.21
LICENSE/REIMBURSEMENT FEE: _____

REMARKS: _____ STATE: _____ % TAX ON \$ _____
COUNTY: _____ % TAX ON \$ _____
CITY: _____ % TAX ON \$ _____
DSI REPRESENTATIVE: **Kevin H. Venter** TOTAL \$ _____

DS 8609

CEMENTING SERVICE REPORT



DOWELL SCHLUMBERGER INCORPORATED

TREATMENT NUMBER 1529-1831	DATE 1-9-88
STAGE DS	DISTRICT CORTIZ, CALDRADA

DS-496 PRINTED IN U.S.A.

WELL NAME AND NO. MUKLESHOOT FEDERAL #15-32 FIELD-POOL	LOCATION (LEGAL) SEC. 15 T385, R2SE FORMATION	RIG NAME: PARKER AIR
COUNTY/PARISH SAN JUAN	STATE UTAH	API. NO.
NAME BWAOR, INC.		
ADDRESS		
ZIP CODE		

WELL DATA:	BOTTOM	TOP
BIT SIZE 24"	CSG/Liner Size 16"	
TOTAL DEPTH 80'	WEIGHT	
<input type="checkbox"/> ROT <input checked="" type="checkbox"/> CABLE	FOOTAGE 80'	
MUD TYPE AR	GRADE	
<input type="checkbox"/> BHST <input type="checkbox"/> BHCT	THREAD WELDED	
MUD DENSITY	LESS FOOTAGE SHOE JOINT(S) 10-15'	TOTAL 5
MUD VISC.	Disp. Capacity 15	

NOTE: Include Footage From Ground Level To Head In Disp. Capacity

SPECIAL INSTRUCTIONS
FURNISH EQUIPMENT & MATERIALS
TO CEMENT 80' OF 16" CONDUCTOR CASING
USING 200 SACKS CLASS B + 3% SI, AS
PER CUSTOMER'S INSTRUCTIONS

Head & Plugs	<input type="checkbox"/> TBG <input type="checkbox"/> D.P.	SQUEEZE JOB
<input type="checkbox"/> Double	SIZE	TOOL TYPE
<input type="checkbox"/> Single	<input type="checkbox"/> WEIGHT	DEPTH
<input checked="" type="checkbox"/> Swage	<input type="checkbox"/> GRADE	TAIL PIPE: SIZE DEPTH
<input type="checkbox"/> Knockoff	<input type="checkbox"/> THREAD	TUBING VOLUME Bbls
TOP <input type="checkbox"/> R <input type="checkbox"/> W	<input type="checkbox"/> NEW <input type="checkbox"/> USED	CASING VOL. BELOW TOOL Bbls
BOT <input type="checkbox"/> R <input type="checkbox"/> W	DEPTH	TOTAL Bbls
		ANNUAL VOLUME Bbls

IS CASING/TUBING SECURED? YES NO

LIFT PRESSURE ~ 27.9 PSI CASING WEIGHT - SURFACE AREA (3.14 x R²)

PRESSURE LIMIT LOW PSI BUMP PLUG TO - PSI

ROTATE - RPM RECIPROCATE - FT No. of Centralizers -

TIME	PRESSURE		VOLUME PUMPED BBL		JOB SCHEDULED FOR			ARRIVE ON LOCATION	LEFT LOCATION
	TBG OR D.P.	CASING	INCREMENT	CUM	TIME: 1500	DATE: 1-9-88	TIME: 1500	DATE: 1-9-88	TIME: 1700
0001 to 2400									
1535									PRE-JOB SAFETY MEETING
1540	40		37.5	0	2.1	H ₂ O	8.34		START H ₂ O TO FILL HOLE & BREAK CIRCULATION
1552	30			37.5	0	"	"		H ₂ O ~ 10 FT. BELOW SURFACE; SHUTDOWN
1559	40		39	0	2	CMT.	15.6		START PUMPING CEMENT SLURRY
1615	80			39	0	"	"		SHUTDOWN; ALL CEMENT MIXED
1616	70		11	0	2.6	H ₂ O	8.34		START DISPLACEMENT w/ H ₂ O
1621	60		4	"	2	"	"		LOWER RATE
1622	60		15	0	0	"	"		SHUTDOWN; CEMENT DISPLACED. CEMENT STAYING @ SURFACE. RELEASED

REMARKS

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS		SLURRY MIXED	
					BBLs	DENSITY
1.	200	1.18	CLASS B + 3% SI CaCl ₂		39	15.6
2.						
3.						
4.						
5.						
6.						

BREAKDOWN FLUID TYPE	VOLUME	DENSITY	PRESSURE	MAX. 80	MIN: 0
<input type="checkbox"/> HESITATION SQ. <input type="checkbox"/> RUNNING SQ.	CIRCULATION LOST	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	Cement Circulated To Surf.	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	~ 5 1/2 Bbls.
BREAKDOWN PSI FINAL	PSI	DISPLACEMENT VOL. 15 Bbls	TYPE <input type="checkbox"/> OIL <input type="checkbox"/> STORAGE <input type="checkbox"/> BRINE WATER	<input type="checkbox"/> WELLS <input type="checkbox"/> GAS <input type="checkbox"/> INJECTION	<input checked="" type="checkbox"/> WILDCAT
Washed Thru Perfs <input type="checkbox"/> YES <input type="checkbox"/> NO	TO	FT MEASURED DISPLACEMENT <input checked="" type="checkbox"/>	<input type="checkbox"/> WIRELINE		

PERFORATIONS TO TO CUSTOMER REPRESENTATIVE DWIGHT PARKER DS SUPERVISOR Steven H. Vestal

DOWELL SCHLUMBERGER INCORPORATED

CUSTOMER

OILFIELD SERVICES
MINING SERVICES
INDUSTRIAL SERVICES

DSI SERVICE ORDER, RECEIPT, AND INVOICE NO.
15-69-1835

CORRESPONDENCE:
P.O. BOX 4378
HOUSTON, TEXAS 77210

REMITTANCE:
P.O. BOX 100344
HOUSTON, TEXAS 77212

DSI SERVICE LOCATION NAME AND NUMBER
Cortez Colorado 15-69

CUSTOMER'S NAME: **BWAB**
ADDRESS:
CITY, STATE AND ZIP CODE:

WORKOVER W
NEW WELL N
OTHER **API OR IC NUMBER**

IMPORTANT
SEE OTHER SIDE FOR TERMS & CONDITIONS
ARRIVE LOCATION: MO. **1** DAY **18** YR. **88** TIME **1300**

DSI shall furnish and Customer shall purchase materials and services required in the performance of the following SERVICE INSTRUCTIONS or DSI INDUSTRIAL SERVICE CONTRACT NO. _____:

Set 1600 foot Plus, of 8 5/8 Casing
With 600 Sacks of Lightweight 3 Cement
Containing 6% D-20 Bentonite 2% Calcium Chloride
+ 1/4#/SK D-29 Cellophane flake, Tail System Class B Cement
with 2% Calcium Chloride + 1/4#/SK D-29 Cellophane flakes 175SK

SERVICE ORDER I authorize work to begin per service instructions in accordance with terms and conditions printed on the reverse side of this form and represent that I have authority to accept and sign this order.

CUSTOMER AUTHORIZED AGENT
X Henry Hayes
JOB COMPLETION: MO. **1** DAY **18** YR. **88** TIME **2300**

SERVICE RECEIPT I certify that the materials and services listed were received and all services performed in a workmanlike manner.

STATE: **Utah** COUNTY / PARISH: **San Juan** CITY:

CUSTOMER AUTHORIZED AGENT
X Henry Hayes

WELL NAME AND NUMBER / JOB SITE: **Muckle Shoot fed, 15-32** LOCATION AND POOL / PLANT ADDRESS: **Sec 15 Twp. 38S. Rge. 25E.**

SHIPPED VIA: **Dowell Schlumberger**

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
059200-001	Mileage on DC-8	MI	74	2.20	162.80
048213-000	Depth Charge	EA	1	1055.00	1055.00
049102-000	Delivery Charge	TJM	295.5	.75	221.625
049100-000	Service Charge	FL3	907	.95	861.65
040002-000	D-902 Class B Cement	SKS	645	7.35	4740.75
045011-000	D-48 Lifepoz G	SKS	210	3.30	693.00
067005-100	S-1 Calcium Chloride	LBS	1614	.30	484.20
000401-008	D-20 Bentonite 6%	FL3	600	.74	444.00
044003-025	D-29 Cellophane flakes	LBS	194	1.20	232.80
050101-085	8 5/8 Cement Guide Shoe	ea	1	220.00	220.00
052004-085	8 5/8 Orifice fill Collar	ea	1	620.00	620.00
056031-085	8 5/8 Centralizers	ea	3	58.00	174.00
056702-085	8 5/8 Top Rubber Plug	ea	1	80.00	80.00
056014-085	8 5/8 Stop Ring	ea	1	19.00	19.00
057499-000	Thread Lock	ea	1	20.00	20.00
048020-000	Additional Hours on Cementer	HRS	3	225.00	675.00
048019-000	Additional Hours on 2 Bulk Units	HRS	5	400.00	2000.00

DOWELL SCHLUMBERGER

Book Price - \$12,898.45 Less 32% Your Price - 8770.95

LICENSE/REIMBURSEMENT FEE

REMARKS:

STATE: _____ % TAX ON \$ _____
COUNTY: _____ % TAX ON \$ _____
CITY: _____ % TAX ON \$ _____

DSI REPRESENTATIVE: **Albert Martinez** TOTAL \$ _____

DS 8609

CEMENTING SERVICE REPORT



DOWELL SCHLUMBERGER INCORPORATED

TREATMENT NUMBER	DATE
15-14-1235	1-18-88
STAGE	DISTRICT
DS	Cartez Colorado

DS-496 PRINTED IN U.S.A.

WELL NAME AND NO.	LOCATION (LEGAL)
M. H. 1.1 F-3, 15 32	15 32 - 25e
FIELD-POOL	FORMATION

COUNTY/PARISH	STATE	API. NO.
Southern	Utah	

NAME	AND	ADDRESS	ZIP CODE
BWAB			

RIG NAME:	Coleman # 4		
WELL DATA:	BOTTOM	TOP	
BIT SIZE 12 1/4	CSG/Liner Size 8 5/8		
TOTAL DEPTH	WEIGHT	24#	
<input type="checkbox"/> ROT <input type="checkbox"/> CABLE	FOOTAGE	1148	
MUD TYPE	GRADE	K-55	
<input type="checkbox"/> BHST <input type="checkbox"/> BHCT	THREAD	8rd.	
MUD DENSITY	LESS FOOTAGE SHOE JOINT(S)	44.34	TOTAL
MUD VISC.	Disp. Capacity	102	

L O O L	TYPE	Orifice Collar	TYPE	
	DEPTH	11.04	DEPTH	
	TYPE	Cement Shoe	TYPE	
	DEPTH	11.49.6	DEPTH	

SPECIAL INSTRUCTIONS
 Pump water Spacer
 Mix + Pump Lead Slurry
 Mix + Pump tail Slurry
 Drop Plug, + Displace
 2 + 1.5 bbl's Permin Last 20 bbl's
 of Displacement

IS CASING/TUBING SECURED?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
LIFT PRESSURE	PSI CASING WEIGHT + SURFACE AREA (3.14 x R ²)
PRESSURE LIMIT	1500 PSI BUMP PLUG TO 1040 PSI
ROTATE	RPM RECIPROCATATE <input checked="" type="checkbox"/> FT No. of Centralizers 3

Head & Plugs	<input type="checkbox"/> TBG <input type="checkbox"/> D.P.	SQUEEZE JOB
<input type="checkbox"/> Double	SIZE	TYPE
<input checked="" type="checkbox"/> Single	WEIGHT	DEPTH
<input type="checkbox"/> Swage	GRADE	TAIL PIPE: SIZE DEPTH
<input checked="" type="checkbox"/> Knockoff	THREAD	TUBING VOLUME Bbls
TOP <input type="checkbox"/> OR <input type="checkbox"/> W	<input type="checkbox"/> NEW <input type="checkbox"/> USED	CASING VOL. BELOW TOOL Bbls
BOT <input type="checkbox"/> OR <input type="checkbox"/> W	DEPTH	TOTAL Bbls
		ANNUAL VOLUME Bbls

TIME	PRESSURE		VOLUME PUMPED BBL		JOB SCHEDULED FOR			ARRIVE ON LOCATION		LEFT LOCATION	
	TBG OR D.P.	CASING	INCREMENT	CUM	TIME: 13:00	DATE: 1-18-88	TIME: 13:00	DATE: 1-18	TIME:	DATE:	
0001 to 2400											
1740	0	10	0	5	water	8.34					
1752	150	190	10	7	cmt	12.4					
1822	100	34	200	4	cmt	15.6					
1835	100	102	234	7	water	8.34					
1840	250			5							
1845	400			4							
1853	700			2							
1858	1040		336	1.5							
1906											
2200	0	11		2.5	cmt	15.9					
2230				347							

REMARKS: PRE-JOB SAFETY MEETING Yes
 Start Water Spacer ahead, Good Circulation,
 Mix + Pump Lead Slurry
 Mixing Completed on Lead System
 Start Mixing tail System
 Mixing Completed
 Shut Down Drop Top Plug, S
 Start Displacement
 40 bbl's away Slow Down Rate
 Bump Plug
 Bump Float Held,
 75 into Displacement Cement at Surf
 Cement fell back, Stand by for top y
 Mix + Pump top off Cement (Annulus)
 Shut Down Cement to Surface

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS				SLURRY MIXED	
							BBLs	DENSITY
1.	600	184	Light Weight 3.1% D-20 2% S-1, 1/4#/sk D-24				196	12.4
2.	175	118	Class B 2% S-1 1/4#/sk D-24				36.7	15.6
3.			(Top off)					
4.	50	118	Class B Cement Containing 3% Calcium Chloride				11	15.9
5.								
6.								

BREAKDOWN FLUID TYPE	VOLUME	DENSITY	PRESSURE	MAX. 1040	MIN:
<input type="checkbox"/> HESITATION SQ.	<input checked="" type="checkbox"/> RUNNING SQ.	CIRCULATION LOST	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	Cement Circulated To Surf.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
BREAKDOWN	PSI FINAL	PSI	DISPLACEMENT VOL.	102 Bbls	TYPE OF WELL
Washed Thru Perfs	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	TO	FT	MEASURED DISPLACEMENT	<input type="checkbox"/> OIL <input type="checkbox"/> GAS
PERFORATIONS	TO	TO	CUSTOMER REPRESENTATIVE	DS SUPERVISOR	Albert Martinez

DOWELL SCHLUMBERGER INCORPORATED

CUSTOMER

OLDFIELD SERVICES
MINING SERVICES
INDUSTRIAL SERVICES

DSI SERVICE ORDER, RECEIPT, AND INVOICE NO.

15-69-1844

CORRESPONDENCE:
P.O. BOX 4378
HOUSTON, TEXAS 77210
CUSTOMER NUMBER

REMITTANCE:
P.O. BOX 100344
HOUSTON, TEXAS 77210
CUSTOMER P.O. NUMBER

DSI SERVICE LOCATION NAME AND NUMBER
Carter Co.
TYPE SERVICE CODE
295
BUSINESS CODES

CUSTOMER'S NAME
BWA B Inc
ADDRESS
CITY, STATE AND ZIP CODE

WORKOVER W
NEW WELL N
OTHER O
API OR IC NUMBER

IMPORTANT
SEE OTHER SIDE FOR TERMS & CONDITIONS

ARRIVE LOCATION MO. DAY YR. TIME
2 5 88 2330

SERVICE ORDER I authorize work to begin per service instructions in accordance with terms and conditions printed on the reverse side of this form and represent that I have authority to accept and sign this order.

CUSTOMER AUTHORIZED AGENT
[Signature]

JOB COMPLETION MO. DAY YR. TIME
6 1988 1400

SERVICE RECEIPT I certify that the materials and services listed were received and all services performed in a workmanlike manner.

CUSTOMER AUTHORIZED AGENT
[Signature]

DSI shall furnish and Customer shall purchase materials and services required in the performance of the following SERVICE INSTRUCTIONS or DSI INDUSTRIAL SERVICE CONTRACT NO. _____:

Furnish Equipment & material to P&A well as instructed w/ 4 plugs & total of 225x4 CB Con.

STATE CODE COUNTY / PARISH CODE CITY
UTAH SAN JUAN

WELL NAME AND NUMBER / JOB SITE LOCATION AND POOL / PLANT ADDRESS
Muckleshoot Fed # 15-32 Sec 15 T 38S R 25E

SHIPPED VIA
DPS

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
059200-001	mileage on 1 unit	miles	57	2.20	125.40
048258-000	DPC to 5000' (5660 TD)	EA	1	1770.00	1770.00
048258-001	Additional footage	EA	660	.20	132.00
040002-000	D902 CB Conent	Sx	225	7.35	1653.75
049102-000	Hauling 250 lbs 57 mi	TM	603	.75	452.25
049100-000	Service on well	PLS	225	.95	213.75
067005-100	S-1 Cement	PLS	200	.30	60.00
048020-000	Additional services	PLS	200	2.25	450.00
	Confirmation				<1554.29
				SUB TOTAL	3302.86

SERVICE
ORDER
AND
RECEIPT

LICENSE/REIMBURSEMENT FEE

REMARKS: STATE % TAX ON \$
COUNTY % TAX ON \$
CITY % TAX ON \$

DSI REPRESENTATIVE *[Signature]* TOTAL \$

CEMENTING SERVICE REPORT



BEST COPY AVAILABLE

DS-496 PRINTED IN U.S.A.

DOWELL SCHLUMBERGER INCORPORATED

TREATMENT NUMBER	DATE
1544	2-6-88
PAGE 1	DISTRICT
DS	Carter Co

WELL NAME AND NO. Mkt sheet for 1532

LOCATION (LEGAL) _____

FORMATION _____

COUNTY/PARISH San Juan STATE Leah API. NO. _____

NAME BWA3 Inc.

AND _____

ADDRESS _____

ZIP CODE _____

RIG NAME: Colman #1

WELL DATA:		BOTTOM	TOP
BIT SIZE <u>7/8</u>	CSG/Liner Size		
TOTAL DEPTH <u>5334</u>	WEIGHT		
<input type="checkbox"/> ROT <input type="checkbox"/> CABLE	FOOTAGE		
MUD TYPE	GRADE		
<input type="checkbox"/> BHST <input type="checkbox"/> BHCT	THREAD		
MUD DENSITY <u>12.8</u>	LESS FOOTAGE SHOE JOINT(S)		TOTAL
MUD VISC.	Disp. Capacity		

NOTE: Include Footage From Ground Level To Head In Disp. Capacity

SPECIAL INSTRUCTIONS

Furnish Equipment & materials to P&A well as instructed set 4 plugs w/ 225# CLB heat

SHOE	If float		Stage Tool	
	TYPE		TYPE	
	DEPTH		DEPTH	
	DEPTH		DEPTH	

Head & Plugs TBG D.P. SQUEEZE JOB

Double Single Swage Knockoff

SIZE 4 1/2 WEIGHT 16.6 GRADE 116.6 THREAD 116.6

TUBING VOLUME _____ Bbls

CASING VOL. BELOW TOOL _____ Bbls

TOTAL _____ Bbls

ANNUAL VOLUME _____ Bbls

IS CASING/TUBING SECURED? YES NO

LIFT PRESSURE _____ PSI CASING WEIGHT + SURFACE AREA (3.14 x R²)

PRESSURE LIMIT _____ PSI BUMP PLUG TO _____ PSI

ROTATE _____ RPM RECIPROCATATE _____ FT No of Centralizers _____

TIME	PRESSURE	VOLUME PUMPED BBL	JOB SCHEDULED FOR			ARRIVE ON LOCATION		LEFT LOCATION	
0001 to 2400	TBG OR D.P. CASING	INCREMENT CUM	TIME	DATE	TIME	DATE	TIME	DATE	
			INJECT RATE	FLUID TYPE	FLUID DENSITY				

TIME	PRESSURE	VOLUME PUMPED BBL	INJECT RATE	FLUID TYPE	FLUID DENSITY	SERVICE LOG DETAIL
2330						PRE-JOB SAFETY MEETING - Rig up Equipment.
0600	300	10	3.9	16.0		Pump water ahead.
0603	100			cem 15.6		mix cement
0607	160	12	4	16.0		cem mixed - shut down - START Disp.
0608	330	3	5	mud 12.8		Follow water w/ 72 Bbls mud. Plug-566-54
0621	400	72	5			Disp Complete - Shut down - Pull Drill Pipe.
0834		10	4	16.0		Pump water ahead of second plug
0836	100		4	cem 15.6		START mixing cem
0839	30	105		11.0		Cem mixed - follow w/ 1.6 Bbls 11.0
0840	80	1.6	4	mud 12.8		Displacement w/ mud
0845	80	31	4			Displacement completed - Shut down -
0921	170	10	3	16.0		Pump water ahead for 3 rd plug.
0924				cem 15.6		START mixing Cem
0931	10	17	4	16.0		cem mixed - Disp w/ 234 11.0
		2	4			19 Bbls mud.
0937	30	19				Shut down - Disp Complete. (Dry)
						Pull 3 STDs Drill Pipe. W/O C

REMARKS Tagged 3rd plug cement at 1541'

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS			SLURRY MIXED	
						BBLs	DENSITY
1.	225	118	CLB Heat		265.5 lbs	47	15.6
2.							
3.							
4.							
5.							
6.							

BREAKDOWN FLUID TYPE _____ VOLUME _____ DENSITY _____ PRESSURE MAX 4100 MIN: _____

HESITATION SQ. RUNNING SQ. CIRCULATION LOST YES NO Cement Circulated To Surf. YES NO Bbls _____

BREAKDOWN PSI FINAL _____ PSI DISPLACEMENT VOL. _____ Bbls

Washed Thru Perfs YES NO TO _____ FT MEASURED DISPLACEMENT WIRELINE

PERFORATIONS _____ CUSTOMER REPRESENTATIVE Kenney Hayes DS SUPERVISOR H. B. Rothermel

DOWELL SCHLUMBERGER INCORPORATED

CUSTOMER

OILFIELD SERVICES
MINING SERVICES
INDUSTRIAL SERVICES

DSI SERVICE ORDER,
RECEIPT, AND INVOICE NO.

CORRESPONDENCE:
P.O. BOX 4378
HOUSTON, TEXAS 77210

REMITTANCE:
P.O. BOX 100344
HOUSTON, TEXAS 77212

DSI SERVICE LOCATION NAME AND NUMBER

CORTEZ, COLORADO 15-69

1569-1831

CUSTOMER NUMBER

CUSTOMER P.O. NUMBER

TYPE SERVICE CODE

275

BUSINESS CODES

CUSTOMER'S NAME

BWAB INC

ADDRESS

CITY, STATE AND ZIP CODE

WORKOVER W
NEW WELL N
OTHER

API OR IC NUMBER

IMPORTANT
SEE OTHER SIDE FOR TERMS & CONDITIONS

ARRIVE LOCATION MO. DAY YR. TIME
| | 9 | 88 | 1500

SERVICE ORDER I authorize work to begin per service instructions in accordance with terms and conditions printed on the reverse side of this form and represent that I have authority to accept and sign this order.

CUSTOMER AUTHORIZED AGENT

JOB COMPLETION MO. DAY YR. TIME
| | 9 | 88 | 1620

SERVICE RECEIPT I certify that the materials and services listed were received and all services performed in a workmanlike manner.

CUSTOMER AUTHORIZED AGENT

FURNISH MATERIALS & EQUIPMENT TO CEMENT 80 FT. 16" CONDUCTOR USING 200 SCS. CLASS B + 3% SI, AS PER CUSTOMER'S INSTRUCTIONS.

STATE CODE COUNTY / PARISH CODE CITY

UTAH SAN JUAN

WELL NAME AND NUMBER / JOB SITE

MUCKLESHOOT FEDERAL # 15-32

LOCATION AND POOL / PLANT ADDRESS

SEC. 15 T385 R25E

CUSTOMER AUTHORIZED AGENT

Dwight Paul

SHIPPED VIA

DOWELL SCHLUMBERGER

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
DAB209 - 000	EQUIPMENT DEPTH CHARGE TO 80'	EA.	1	575.00	575.00
DS9200 - 001	MILEAGE ON PUMPER @ 57 MILES	MILE	57	2.20	125.40
040002 - 000	D902 CLASS B CEMENT	SACK	200	7.35	1,470.00
067005 - 100	SI, CALCIUM CHLORIDE	LB.	564	0.30	169.20
049102 - 000	TRANSPORTATION - DELIVERY CHARGE 9.68 TONS X 57 MI. = 552 T-M	T-M	552	0.75	414.00
049100 - 000	SERVICE CHARGE	FT. ³	211	0.95	200.45
00006 - 001	CONFIRM TO BID - EQUIPMENT	%	33		<433.90>
00006 - 002	CONFIRM TO BID - MATERIALS	%	33		<540.94>
THANK YOU FOR USING DOWELL SCHLUMBERGER!					
REGISTERED					

SUB TOTAL

BOOK PRICE: \$ 2,954.45 DISCOUNTED FIELD ESTIMATE: \$ 1,979.21

LICENSE/REIMBURSEMENT FEE

LICENSE/REIMBURSEMENT FEE

REMARKS:

STATE

% TAX ON \$

COUNTY

% TAX ON \$

CITY

% TAX ON \$

DSI REPRESENTATIVE

TOTAL \$

Steven H. Usterdal

DS 6609

CEMENTING SERVICE REPORT



DOWELL SCHLUMBERGER INCORPORATED

TREATMENT NUMBER 1529-1831	DATE 1-9-88
STAGE DS	DISTRICT CORTIZ, CALDERA

DS-496 PRINTED IN U.S.A.

WELL NAME AND NO. MUKLESHOOT FEDERAL #15-32	LOCATION (LEGAL) SEC. 15 T38S R2SE	RIG NAME: PARKER AIR
FIELD-POOL	FORMATION	WELL DATA:
COUNTY/PARISH SAN JUAN	STATE UTAH	API. NO.
NAME BWA, INC	AND	ADDRESS
ZIP CODE	SPECIAL INSTRUCTIONS FURNISH EQUIPMENT & MATERIALS TO CEMENT 80' OF 6" CONDUCTOR CASING USING 200 SACKS CLASS B + 3% SI, AS PER CUSTOMER'S INSTRUCTIONS	
IS CASING/TUBING SECURED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	LIFT PRESSURE ~27.9 PSI	CASING WEIGHT - SURFACE AREA (3.14 x R ²)
PRESSURE LIMIT LDW PSI	BUMP PLUG TO - PSI	ROTATE - RPM
RECIPROCATATE - FT	No. of Centralizers -	

BOTTOM		TOP	
BIT SIZE 2 1/2"	CSG/Liner Size 6"		
TOTAL DEPTH 80'	WEIGHT		
<input type="checkbox"/> ROT <input checked="" type="checkbox"/> CABLE	FOOTAGE 80'		
MUD TYPE AR	GRADE		
<input type="checkbox"/> BHST <input type="checkbox"/> BHCT	THREAD WELDED		
MUD DENSITY	LESS FOOTAGE SHOE JOINT(S) 10.15'		TOTAL
MUD VISC. -	Disp. Capacity 15		5

NOTE: Include Footage From Ground Level To Head In Disp. Capacity

Float	TYPE	DEPTH	Stage Tool	TYPE	DEPTH
Head & Plugs		<input type="checkbox"/> TBG	<input type="checkbox"/> D.P.	SQUEEZE JOB	
<input type="checkbox"/> Double	SIZE	TOOL		TYPE	
<input type="checkbox"/> Single	WEIGHT	TOOL		DEPTH	
<input checked="" type="checkbox"/> Swage	GRADE	TAIL PIPE: SIZE		DEPTH	
<input type="checkbox"/> Knockoff	THREAD	TUBING VOLUME		Bbls	
TOP <input type="checkbox"/> R <input type="checkbox"/> W	<input type="checkbox"/> NEW <input type="checkbox"/> USED	CASING VOL. BELOW TOOL		Bbls	
BOT <input type="checkbox"/> R <input type="checkbox"/> W	DEPTH	TOTAL		Bbls	
		ANNUAL VOLUME		Bbls	

TIME	PRESSURE		VOLUME PUMPED BBL		JOB SCHEDULED FOR			ARRIVE ON LOCATION		LEFT LOCATION	
	TBG OR D.P.	CASING	INCREMENT	CUM	TIME	DATE	FLUID TYPE	FLUID DENSITY	TIME	DATE	
0001 to 2400											
1535											
1540	40		37.5	D	2.1	H ₂ O	8.34				
1552	30		37.5	D	"	"	"				
1559	40		39	D	2	CMT.	15.6				
1615	80		39	D	"	"	"				
1616	70		11	D	2.6	H ₂ O	8.34				
1621	60		4	"	2	"	"				
1622	60		15	D	"	"	"				

REMARKS

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS		SLURRY MIXED	
					BBLs	DENSITY
1.	200	1.18	CLASS B + 3% SI CaCl ₂		37	15.6
2.						
3.						
4.						
5.						
6.						

BREAKDOWN FLUID TYPE	VOLUME	DENSITY	PRESSURE	MAX. 80	MIN: 0
<input type="checkbox"/> HESITATION SQ.	<input type="checkbox"/> RUNNING SQ.	CIRCULATION LOST	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	Cement Circulated To Surf. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO ~5 1/2 Bbls.	
BREAKDOWN	PSI FINAL	PSI	DISPLACEMENT VOL. 15	Bbls	TYPE OF WELL <input type="checkbox"/> OIL <input type="checkbox"/> GAS
Washed Thru Perfs <input type="checkbox"/> YES <input type="checkbox"/> NO	TO	FT	MEASURED DISPLACEMENT <input checked="" type="checkbox"/>	<input type="checkbox"/> WIRELINE	<input type="checkbox"/> STORAGE <input type="checkbox"/> INJECTION <input type="checkbox"/> BRINE WATER <input checked="" type="checkbox"/> WILDCAT
PERFORATIONS	TO	TO	CUSTOMER REPRESENTATIVE	DS SUPERVISOR	
			DWIGHT PARKER		Steven H. Vestal

DOWELL SCHLUMBERGER INCORPORATED

CUSTOMER

OILFIELD SERVICES
MINING SERVICES
INDUSTRIAL SERVICES

DSI SERVICE ORDER, RECEIPT, AND INVOICE NO.

CORRESPONDENCE:
P.O. BOX 4378
HOUSTON, TEXAS 77210

REMITTANCE:
P.O. BOX 100344
HOUSTON, TEXAS 77212

DSI SERVICE LOCATION NAME AND NUMBER

Cortez Colorado 15-69

15-69-1835

CUSTOMER NUMBER

CUSTOMER P.O. NUMBER

TYPE SERVICE CODE

BUSINESS CODES

CUSTOMER'S NAME

BWAB

ADDRESS

CITY, STATE AND ZIP CODE

DSI shall furnish and Customer shall purchase materials and services required in the performance of the following SERVICE INSTRUCTIONS or DSI INDUSTRIAL SERVICE CONTRACT NO. _____:

Set 1600 foot Plus, of 8 5/8 Casing
With 600 Sacks of Lightweight 3 Cement
Containing 6% D-20 Bentonite 2% Calcium Chloride
+ 1/4" SK D-29 Cellophane Flake, Tail System Class B Cement
with 2% Calcium Chloride + 1/4" SK D-29 Cellophane flakes 175 SKS

WORKOVER W
NEW WELL N
OTHER

API OR IC NUMBER

IMPORTANT
SEE OTHER SIDE FOR TERMS & CONDITIONS

ARRIVE LOCATION MO. DAY YR. TIME
1 18 88 1300

SERVICE ORDER I authorize work to begin per service instructions in accordance with terms and conditions printed on the reverse side of this form and represent that I have authority to accept and sign this order.

CUSTOMER AUTHORIZED AGENT

X *Randy Hayes*

JOB COMPLETION MO. DAY YR. TIME
1 18 88 2300

SERVICE RECEIPT I certify that the materials and services listed were received and all services performed in a workmanlike manner.

CUSTOMER AUTHORIZED AGENT

X *Randy Hayes*

STATE CODE COUNTY / PARISH CODE CITY

Utah San Juan

WELL NAME AND NUMBER / JOB SITE

Muckle Shoot fed, 15-32

LOCATION AND POOL / PLANT ADDRESS

Sec 15 Twp. 38 S. Rge. 25 E.

SHIPPED VIA

Dowell Schlumberger

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
059200-001	Mileage on DC-8	MI	74	2.20	162.80
048213-000	Depth Charge	EA	1	1055.00	1055.00
049102-000	Delivery Charge	T/M	295.5	.75	221.625
049100-000	Service Charge	FL3	907	.95	861.65
040002-000	D-902 Class B Cement	SKS	645	7.35	4740.75
045011-000	D-48 Lafpoz G.	SKS	210	3.30	693.00
067005-100	S-1 Calcium Chloride	LBS	1614	.30	484.20
000401-008	D-20 Bentonite 6%	FL3	600	.74	444.00
044003-025	D-29 Cellophane flakes	LBS	194	1.20	232.80
050101-085	8 5/8 Cement Guide Shoe	ea	1	220.00	220.00
052004-085	8 5/8 Orifice fill Collar	ea	1	620.00	620.00
056031-085	8 5/8 Centralizers	ea	3	58.00	174.00
056702-085	8 5/8 Top Rubber Plug	ea	1	80.00	80.00
056014-085	8 5/8 Stop Ring	ea	1	19.00	19.00
057499-000	Thread Lock	ea	1	20.00	20.00
048020-000	Additional Hours on Cementer	HRS	3	225.00	675.00
048019-000	Additional Hours on 2 Bulk Units	HRS	5	400.00	2000.00

SUB TOTAL

Book Price - \$ 12,898.45 Less 32%

Your Price - 8770.95

LICENSE/REIMBURSEMENT FEE

LICENSE/REIMBURSEMENT FEE

REMARKS:

STATE	% TAX ON \$
COUNTY	% TAX ON \$
CITY	% TAX ON \$
DSI REPRESENTATIVE	TOTAL \$

Albert Martinez

DS 6609

CEMENTING SERVICE REPORT



DOWELL SCHLUMBERGER INCORPORATED

TREATMENT NUMBER	DATE
15-141-1235	1-18-88
STAGE	DISTRICT
DS	Cartez Colorado

DS-496 PRINTED IN U.S.A.

WELL NAME AND NO.	LOCATION (LEGAL)
M.H. 1-1 F-3, 15 32	15 Truss 38 1/2 - 25c
FIELD-POOL	FORMATION

COUNTY/PARISH	STATE	API. NO.
Soc. 102	Utah	

NAME **BWAB**

AND _____

ADDRESS _____

ZIP CODE _____

RIG NAME:		Coloman #4	
WELL DATA:		BOTTOM	
BIT SIZE 12 1/4	CSG/Liner Size	8 5/8	
TOTAL DEPTH	WEIGHT	24#	
<input type="checkbox"/> ROT <input type="checkbox"/> CABLE	FOOTAGE	1128	
MUD TYPE	GRADE	K-55	
<input type="checkbox"/> BHST <input type="checkbox"/> BHCT	THREAD	8rd.	
MUD DENSITY	LESS FOOTAGE SHOE JOINT(S)	44.34	
MUD VISC.	Disp. Capacity	102	

NOTE: Include Footage From Ground Level To Head In Disp. Capacity

SPECIAL INSTRUCTIONS

Pump water spacer

Mix + Pump Lead Slurry

Mix + Pump tail Slurry

Drop Plug + Displace

2 + 1.5 bbl's Permin Last 20 bbl's of Displacement

Float	TYPE	Orifice Collor	TYPE	
	DEPTH	11.04	DEPTH	
Shoe	TYPE	Cement Shoe	TYPE	
	DEPTH	11.49.6	DEPTH	
Head & Plugs	<input type="checkbox"/> TBG <input type="checkbox"/> D.P.	SQUEEZE JOB		
<input type="checkbox"/> Double	SIZE	TOOL	TYPE	
<input checked="" type="checkbox"/> Single	WEIGHT		DEPTH	
<input type="checkbox"/> Swage	GRADE	TAIL PIPE: SIZE DEPTH		
<input checked="" type="checkbox"/> Knockoff	THREAD	TUBING VOLUME Bbls		
TOP <input type="checkbox"/> R <input type="checkbox"/> W	<input type="checkbox"/> NEW <input type="checkbox"/> USED	CASING VOL. BELOW TOOL Bbls		
BOT <input type="checkbox"/> R <input type="checkbox"/> W	DEPTH	TOTAL Bbls		
		ANNUAL VOLUME Bbls		

IS CASING/TUBING SECURED? YES NO

LIFT PRESSURE _____ PSI CASING WEIGHT + SURFACE AREA (3.14 x R²)

PRESSURE LIMIT 1500 PSI BUMP PLUG TO 1040 PSI

ROTATE _____ RPM RECIPROCATE FT No. of Centralizers 3

ARRIVE ON LOCATION TIME: 13:00 DATE: 1-18

LEFT LOCATION TIME: _____ DATE: _____

TIME	PRESSURE		VOLUME PUMPED BBL		INJECT RATE	FLUID TYPE	FLUID DENSITY	SERVICE LOG DETAIL
	TBG OR D.P.	CASING	INCREMENT	CUM				
0001 to 2400								PRE-JOB SAFETY MEETING Yes
1740	0	10	0	5	water	8.34	Start water spacer ahead, Good Circulation	
1752	150	190	10	7	cmt	12.4	Mix + Pump Lead Slurry	
						12.4	Mixing Completed on Lead System	
1822	100	34	200	4	cmt	15.6	Start Mixing tail System	
						15.6	Mixing Completed	
							Shut Down Drop Top Plug, S	
1835	100	102	234	7	water	8.34	Start Displacement	
1840	250			5			40 bbl's away slow down rate	
1845	400			4				
1853	700			2				
1858	1040		336	1.5			Bump Plug	
1906							Bump float held,	
							75 into displacement cement at surf	
							cement fell back, stand by for top plug	
2200	0	11		2.5	cmt	15.9	Mix + Pump top off cement (Annulus)	
2230			347				Shut Down Cement to Surface	

REMARKS

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS				SLURRY MIXED			
			BBLs	DENSITY	BBLs	DENSITY				
1.	100	1.84	Light Weight	3.1%	D-20	2%	S-1	1/4#/sk D-20	196	12.4
2.	175	1.18	Class B	2%	S-1	1/4#/sk	D-20		36.7	15.6
3.			(Top off)							
4.	50	1.18	Class B Cement	Containing 3% Calcium Chloride					11	15.9
5.										
6.										

BREAKDOWN FLUID TYPE	VOLUME	DENSITY	PRESSURE	MAX. 1040	MIN:
<input type="checkbox"/> HESITATION SQ. <input type="checkbox"/> RUNNING SQ.	CIRCULATION LOST	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	Cement Circulated To Surf.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	Bbls.
BREAKDOWN	PSI	FINAL	PSI	DISPLACEMENT VOL.	102 Bbls
Washed Thru Perfs	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	TO	FT	MEASURED DISPLACEMENT	<input type="checkbox"/> WIRELINE
PERFORMATIONS	TO	TO	CUSTOMER REPRESENTATIVE	DS SUPERVISOR	Albert Martinez

DOWELL SCHLUMBERGER INCORPORATED

CUSTOMER

OILFIELD SERVICES
MINING SERVICES
INDUSTRIAL SERVICES

DSI SERVICE ORDER, RECEIPT, AND INVOICE NO. **15-69-1844**

CORRESPONDENCE: P.O. BOX 4378 HOUSTON, TEXAS 77210

REMITTANCE: P.O. BOX 100344 HOUSTON, TEXAS 77212

DSI SERVICE LOCATION NAME AND NUMBER **Carter Co.**

CUSTOMER NUMBER _____ CUSTOMER P.O. NUMBER _____

TYPE SERVICE CODE **295** BUSINESS CODES _____

CUSTOMER'S NAME **B W A B Inc**

ADDRESS _____

CITY, STATE AND ZIP CODE _____

WORKOVER W
NEW WELL N
OTHER

API OR IC NUMBER _____

IMPORTANT
SEE OTHER SIDE FOR TERMS & CONDITIONS

ARRIVE LOCATION MO. DAY YR. TIME
2 5 1988 2330

SERVICE ORDER I authorize work to begin per service instructions in accordance with terms and conditions printed on the reverse side of this form and represent that I have authority to accept and sign this order.

CUSTOMER AUTHORIZED AGENT
[Signature]

JOB COMPLETION MO. DAY YR. TIME
6 1988 1400

SERVICE RECEIPT I certify that the materials and services listed were received and all services performed in a workmanlike manner.

CUSTOMER AUTHORIZED AGENT
[Signature]

DSI shall furnish and Customer shall purchase materials and services required in the performance of the following SERVICE INSTRUCTIONS or DSI INDUSTRIAL SERVICE CONTRACT NO. _____

furnish Equipment & material to DSA well as instructed w/ 4 plugs & total of 225xCLB Cement

STATE **UTAH** CODE _____ COUNTY / PARISH **SAN JUAN** CODE _____ CITY _____

WELL NAME AND NUMBER / JOB SITE **Muckleshoot Fed # 15-32** LOCATION AND POOL / PLANT ADDRESS **Sec 15 T38S R25E**

SHIPPED VIA **D/S**

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
059200-001	mileage on unit	miles	57	2.20	125.40
048258-000	DPC to 5000' (5660 TD)	EA	1	1770.00	1770.00
048258-001	Additional footage	EA	660	.20	132.00
040002-000	D902 CLB Cement	Sx	225	7.35	1653.75
049102-000	Hauling approx 50 lbs 57 mi	TM	603	.75	452.25
049100-000	Service of well	PLS	225	.95	213.75
067005-100	5-1 Cement	PLS	200	.30	60.00
048020-000	Additional cement	PLS	225	2.00	450.00
					< 1554.29
SUB TOTAL					3302.86

SERVICE ORDER AND RECEIPT

LICENSE/REIMBURSEMENT FEE _____

LICENSE/REIMBURSEMENT FEE _____

REMARKS: _____

STATE _____ % TAX ON \$ _____

COUNTY _____ % TAX ON \$ _____

CITY _____ % TAX ON \$ _____

DSI REPRESENTATIVE *[Signature]* TOTAL \$ _____

DS 8609

CEMENTING SERVICE REPORT



TREATMENT NUMBER DATE

DS-496 PRINTED IN U.S.A.

DOWELL SCHLUMBERGER INCORPORATED

STAGE 1 DS 1844 DISTRICT 2-6-88

WELL NAME AND NO. LOCATION (LEGAL) RIG NAME:

FIELD POOL: *shut in F1532* FORMATION: *CL B Heat*

COUNTY/PARISH STATE API. NO.

San Juan Leah

NAME *BWA B Inc.*

AND

ADDRESS

ZIP CODE

WELL DATA: BOTTOM TOP

BIT SIZE *7 7/8* CSG/Liner Size

TOTAL DEPTH *2934* WEIGHT

ROT CABLE FOOTAGE

MUD TYPE GRADE

BHST BHCT THREAD

MUD DENSITY *12.9* LESS FOOTAGE SHOE JOINT(S)

MUD VISC. Disp. Capacity

NOTE: Include Footage From Ground Level To Head In Disp. Capacity

SPECIAL INSTRUCTIONS

Furnish Equipment & materials to PNA well as instructed set 4 plugs w/ 2255 CL B Heat

SHOE FLOAT TYPE DEPTH

STAGE TOOL TYPE DEPTH

HEAD & PLUGS TBG D.P. SQUEEZE JOB

Double SIZE *4 1/2* TOOL TYPE

Single WEIGHT *16.6* DEPTH

Swage GRADE TAIL PIPE: SIZE DEPTH

Knockoff THREAD *x 11.6* TUBING VOLUME Bbls

TOP R W NEW USED CASING VOL. BELOW TOOL Bbls

BOT R W DEPTH *5660* TOTAL Bbls

ANNUAL VOLUME Bbls

IS CASING/TUBING SECURED? YES NO

LIFT PRESSURE PSI CASING WEIGHT + SURFACE AREA (3.14 x R²)

PRESSURE LIMIT PSI BUMP PLUG TO PSI

ROTATE RPM RECIPROCATATE FT No. of Centralizers

TIME	PRESSURE		VOLUME PUMPED BBL		JOB SCHEDULED FOR TIME & DATE			ARRIVE ON LOCATION TIME & DATE		LEFT LOCATION TIME & DATE	
	TBG OR D.P.	CASING	INCREMENT	CUM	INJECT RATE	FLUID TYPE	FLUID DENSITY	TIME	DATE	TIME	DATE

SERVICE LOG DETAIL											
0001 to 2400											
2330										PRE-JOB SAFETY MEETING - Rig up Equipment.	
0600	300		10		3.9	16.0				Pump water ahead.	
0603	100					cem 15.6				mix cement	
0607	100		10	22	4	16.0				Cem mixed - Shut down - START Disp.	
0608	330		3	25	5	mud 10.2				Follow water w/ 72 Bbls mud. Plug-5660-54	
0621	400		72	97	5					Disp Complete - Shut down - Pull Drill Pipe.	
0634			10		4	16.0				Pump water ahead of second plug	
0636	100				4	cem 15.6				START mixing Cem	
0639	30		105			16.0				Cem mixed - follow w/ 1.6 Bbls H ₂ O	
0640	80		1.6	106.6	4	mud 10.2				Displacement w/ mud	
0645	60		31	36.6						Displacement completed - Dry - Shut down.	
0621	170		10		3	16.0				Pump water ahead for 3 rd plug.	
0624						cem 15.6				START mixing Cem	
0631	10		17	27	4	16.0				Cem mixed - Disp w/ 236 H ₂ O	
			2	29	4					19 Bbls mud.	
0637	30		19	38						Shut down - Disp Complete - (Dry)	
										Pull 3 FTs Drill Pipe. WLOC	

REMARKS *Tagged 225 plug cement at 1541'*

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS			SLURRY MIXED		
						BBLs	DENSITY	
1.	225	1.18	CL B Heat			265.5 lbs	47	15.6
2.								
3.								
4.								
5.								
6.								

BREAKDOWN FLUID TYPE VOLUME DENSITY PRESSURE MAX. MIN.

HESITATION SQ. RUNNING SQ. CIRCULATION LOST YES NO Cement Circulated To Surf. YES NO Bbls

BREAKDOWN PSI FINAL PSI DISPLACEMENT VOL. Bbls TYPE OF WELL OIL STORAGE BRINE WATER GAS INJECTION WILDCAT

Washed Thru Perfs YES NO TO FT MEASURED DISPLACEMENT WIRELINE

PERFORATIONS CUSTOMER REPRESENTATIVE DS SUPERVISOR

TO TO *Harvey Hayes* *B & R Rotherford*

BWAB INCORPORATED



February 9, 1988

RECEIVED
FEB 16 1988

State of Utah
Department of Natural Resources
Division of Oil, Gas & Mining
3 Triad Center, Suite 350
Salt Lake City, UT 84180-1203

DIVISION OF
OIL, GAS & MINING

RE: Muckleshoot Federal #15-32
SWNE Sec. 15-T38S-R25E
San Juan Co., UT

Gentlemen:

Enclosed herewith is one (1) original and two (2) copies each of our Well Completion Report and Sundry Notice for the above captioned well. The logs, DST reports and geological report will be filed under separate cover. If you have any questions in this regard, please do not hesitate to contact the undersigned.

Very truly yours,

BWAB Incorporated

Carrie M. Sullivan

Carrie M. Sullivan

:CMS

Enclosure (6)

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

RECEIVED
FEB 16 1988

5. LEASE DESIGNATION AND SERIAL NO.	U-47970
6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
7. UNIT AGREEMENT NAME	
8. FARM OR LEASE NAME	Muckleshoot Federal
9. WELL NO.	#15-32
10. FIELD AND POOL, OR WILDCAT	Undesignated
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA	Sec. 15-T38S-R25E
12. COUNTY OR PARISH	San Juan
13. STATE	UT

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
BWAB Incorporated

3. ADDRESS OF OPERATOR
1801 California St., Suite 1000, Denver, CO 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)
At surface
SWNE 2600' FEL & 1890' FNL

Bottom Hole Location: NWNE 2082.75' FEL & 1528.74' FNL

14. PERMIT NO.	15. ELEVATIONS (Show whether OF, RT, GR, etc.)
API No. 43-037-31380	5247' GL

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 checked="" type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	(Other) <input type="checkbox"/>

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

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

01/10/88 Set 80' 16" conductor & cemented to surface with 200 sxs Class "B" + additives.

01/16/88 Spudded 12 1/4" hole @ 7:30 pm 01/16/88.

01/18/88 Ran 39 jts 8-5/8", 24#, K-55 csg. Set @ 1645' KB. Cemented with 600 sxs 65/35 poz + additives & 225 sxs Class "B" + additives.

02/01/88 Ran DST #1 from 5590'-5612', the Ismay formation.

02/03/88 Ran DST #2 from 5588'-5647', the Ismay formation.

02/04/88 Ran CNL/CDL/GR log & DLL/SP/GR & MLL log.

02/06/88 Well was plugged as follows:
 Plug #1: 5660'-5460' 60 sxs Reg cmt.
 Plug #2: 2480'-2380' 50 sxs Reg cmt.
 Plug #3: 1750'-1550' 80 sxs Reg cmt.
 Plug #4: 50'-0' 25 sxs Reg cmt.
 Welded dry hole marker on. Released rig @ 6:00 pm 02/06/88.
 PLUGGED & ABANDONED 02/06/88.

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

SIGNED John R. Keller TITLE Drlg. & Prod. Manager DATE 02/10/88

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

DATE: 2-16-88
BY: John R. Daza

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

5. LEASE DESIGNATION AND SERIAL NO.
U-47970

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Muckleshoot Federal

9. WELL NO.
#15-32

10. FIELD AND POOL, OR WILDCAT
Undesignated

11. SEC., T., R., M., OR BLK. AND SURVEY OR ABBA
Sec. 15-T38S-R25E

12. COUNTY OR PARISH
San Juan

13. STATE
UT

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.)

RECEIVED
FEB 16 1988

1. OIL WELL GAS WELL OTHER DIVISION OF OIL, GAS & MINING

2. NAME OF OPERATOR
BWAB Incorporated

3. ADDRESS OF OPERATOR
1801 California St., Suite 1000, Denver, CO 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)
At surface
SWNE 2600' FEL & 1890' FNL
Bottom Hole Location: NWNE 2082.75' FEL & 1528.74' FNL

14. PERMIT NO.
API No. 43-037-31380

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
5247' GL

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 checked="" type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	(Other) <input type="checkbox"/>

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

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

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 Plug #3: 1750'-1550' 80 sxs Reg cmt.
 Plug #4: 50'-0' 25 sxs Reg cmt.
 Welded dry hole marker on. Released rig @ 6:00 pm 02/06/88.
 PLUGGED & ABANDONED 02/06/88.

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

SIGNED John R. Keller TITLE Drlg. & Prod. Manager DATE 02/10/88

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____

CONDITIONS OF APPROVAL, IF ANY:

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

DATE: 2-16-88
BY: John R. Keller

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

RECEIVED
SUBMIT IN DUPLICATE*
(See other instructions on reverse side)
FEB 16 1988

56 64 01 7

WELL COMPLETION OR RECOMPLETION REPORTS AND LOGS*

5. LEASE DESIGNATION AND SERIAL NO.

U-47970 *ML*

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

021707

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Muckleshoot Fed.

9. WELL NO.

15-32

10. FIELD AND POOL, OR WILDCAT

Undesignated

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

Sec. 15-T38S-R25E

12. COUNTY OR PARISH

San Juan

13. STATE

UT

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

b. TYPE OF COMPLETION: NEW WELL WORK OVER DEEP-EN PLEG BACK DIFF. RESVR. Other P&A'd

2. NAME OF OPERATOR
BWAB Incorporated

3. ADDRESS OF OPERATOR
1801 California St, Suite 1000, Denver, CO 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface SWNE 2600' FEL & 1890' FNL
At top prod. interval reported below
At total depth NWNE 2082.75' FEL & 1528.74' FNL

14. PERMIT NO. DATE ISSUED
API #43-037-31880 12/28/87

15. DATE SPUDDED 16. DATE T.D. REACHED 17. DATE COMPL. (Ready to prod.) 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 19. ELEV. CASINGHEAD

01/10/88 02/04/88 P&A'd 01/06/88 5247' GL

20. TOTAL DEPTH, MD & TVD 21. PLUG, BACK T.D., MD & TVD 22. IF MULTIPLE COMPL., HOW MANY* 23. INTERVALS DRILLED BY 24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*

4'; TVD-5847.7' N/A 0-5939'

25. WAS DIRECTIONAL SURVEY MADE
NONE YES

26. TYPE ELECTRIC AND OTHER LOGS RUN 27. WAS WELL CORED
CNL/CDL/GR, DLL/SP/GR, MLL NO

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8"	24#	1633'	12 1/4"	600 sxs 65/35 poz + additives & 225 sxs Class "B" + additives No csg pulled.	

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 N/A 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 *John R. Keller* TITLE Drlg. & Prod. Manager DATE 2/10/88

*(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

DESCRIPTION, CONTENTS, ETC.

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	MEAS. DEPTH	TOP TRADE VERT. DEPTH
SEE DRILL STEM			TEST REPORTS SENT UNDER SEPARATE COVER.	Upper Ismay Hovenweep Lower Ismay Gothic Shale Desert Creek Akah TD *Drillers TD.	5560' 5702' 5742' 5792' 5812' 5908' 5939'*	5498' 5636' 5676' 5731' 5751' 5846'

38. GEOLOGIC MARKERS

BWAB INCORPORATED



October 18, 1988

Division of Oil, Gas & Mining
State of Utah
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

Attention: Records Department

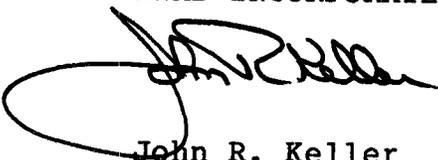
RE: Muckleshoot Federal #15-32
Section 15-T38S-R25E
San Juan County, Utah
Federal Lease No. U-47970
API Permit #43-037-31380

Gentlemen:

Enclosed please find a copy of the directional survey for the referenced well. We apologize for the delay in sending this to you; it was inadvertently misfiled. If further information is needed, please advise.

Respectfully,

BWAB INCORPORATED



John R. Keller
Drilling and Production Manager

JRK/ep
enclosure

RECEIVED
OCT 24 1988

DIVISION OF
OIL, GAS & MINING

DIRECTIONAL DRILLING REPORT

DATE 10-FEBRUARY-1988

COMPANY B.W.A.B., INCORPORATED

WELL MUCKLESHOOT FEDERAL NO. 15-32

LOCATION LEASE #U-47970

SAN JUAN COUNTY, UTAH

MAGNETIC DECLINATION _____



Job # D8-12113

B.W.H.B., INCORPORATED
 LEASE #U-47970
 HUCKLESHOOT FEDERAL 15-32
 SAN JUAN COUNTY, UTAH
 WILSON DOWNHOLE DIRECTIONAL DRILLING
 WILSON SUPERVISOR ** KENT ASAY
 SINGLE-SHOT SURVEY RAN -- JAN. 17 THRU FEB. 5, 1988
 JOB NO. DB-12113

PLANE OF PROPOSED DIRECTION IS N55. DEG.47. MIN. E

RECORD OF SURVEY

ALL CALCULATIONS PERFORMED BY DIGITAL ELECTRONIC COMPUTER

RADIUS OF CURVATURE METHOD

MEAS. DEPTH	DRIFT ANGLE D M	TRUE VERTICAL DEPTH	VERTICAL SECTION	DRIFT DIREC DEG	PAGE 1 TOTAL COORDINATES	C L O S U R E S			DOG LEG SEVERITY DEG/100FT
						DISTANCE	ANGLE D M S		
1000	0 0	1000.00	0.00	N 0 E	0.00 N 0.00 E	0.00 N	90 0 0	E	0.000
1646	0 45	1645.97	-2.72	N 75 W	1.10 N 4.09 W	4.23 N	75 0 0	W	0.136
1779	1 0	1778.96	-4.03	N 75 W	1.62 N 6.05 W	6.26 N	75 0 0	W	0.188
2005	1 0	2004.92	-6.62	N 77 W	2.58 N 9.88 W	10.21 N	75 23 12	W	0.015
2250	1 0	2249.88	-5.95	N 66 E	3.93 N 10.01 W	10.75 N	68 34 37	W	0.774
2437	0 15	2436.87	-3.99	N 83 E	4.64 N 8.11 W	9.34 N	60 13 31	W	0.413
2622	0 0	2621.87	-3.63	N 0 E	4.69 N 7.71 W	9.02 N	58 41 24	W	0.162
2658	0 45	2657.87	-3.40	N 48 E	4.85 N 7.54 W	8.96 N	57 14 45	W	2.249
2689	1 15	2688.86	-2.86	N 48 E	5.21 N 7.13 W	8.83 N	53 51 22	W	1.613
2751	2 45	2750.83	-0.71	N 51 E	6.60 N 5.48 W	8.57 N	39 40 22	W	2.425
2845	5 15	2844.59	5.84	N 55 E	10.49 N 0.20 W	10.49 N	1 3 41	W	2.676
2876	6 0	2875.44	8.88	N 55 E	12.23 N 2.30 E	12.44 N	10 37 54	E	2.419
2976	8 15	2974.65	21.28	N 55 E	19.34 N 12.46 E	23.01 N	32 46 52	E	2.250
3038	9 30	3035.90	30.85	N 55 E	24.83 N 20.29 E	32.06 N	39 15 31	E	2.016
3130	11 0	3126.43	47.20	N 51 E	34.71 N 33.33 E	48.12 N	43 50 37	E	1.805

MEAS. DEPTH	DRIFT ANGLE D M	TRUE VERTICAL DEPTH	VERTICAL SECTION	DRIFT DIREC DEG	PAGE 2 TOTAL	COORDINATES	C L O S U R E S			DOG LEG SEVERITY DEG/100FT
							DISTANCE	ANGLE D H S		
3191	11 45	3186.23	59.20	N 51 E	42.28	N 42.68 E	60.08	N 45 16 23 E	1.230	
3320	12 45	3312.29	86.50	N 51 E	59.50	N 63.95 E	87.35	N 47 3 54 E	0.775	
3497	12 15	3485.09	124.71	N 51 E	83.61	N 93.73 E	125.60	N 48 15 52 E	0.282	
3665	11 45	3649.42	159.58	N 53 E	105.12	N 121.24 E	160.47	N 49 4 21 E	0.387	
3845	11 30	3825.73	195.84	N 56 E	126.19	N 150.75 E	196.59	N 50 4 9 E	0.363	
4030	11 0	4007.18	231.92	N 57 E	146.11	N 180.84 E	232.49	N 51 3 49 E	0.290	
4184	10 45	4158.41	260.95	N 58 E	161.73	N 205.35 E	261.38	N 51 46 37 E	0.203	
4291	12 15	4263.25	282.25	N 58 E	173.03	N 223.43 E	282.60	N 52 14 45 E	1.402	
4392	14 0	4361.61	305.17	N 56 E	185.54	N 242.65 E	305.46	N 52 35 51 E	1.790	
4521	14 15	4486.71	336.64	N 56 E	203.14	N 268.75 E	336.89	N 52 54 55 E	0.194	
4708	13 30	4668.26	381.46	N 58 E	227.58	N 306.34 E	381.62	N 53 23 30 E	0.476	
4921	11 45	4876.08	427.94	N 58 E	252.25	N 345.82 E	428.04	N 53 53 32 E	0.822	
5011	12 0	4964.15	446.44	N 58 E	262.06	N 361.52 E	446.51	N 54 3 45 E	0.278	
5106	14 0	5056.72	467.80	N 56 E	273.72	N 379.43 E	467.85	N 54 11 35 E	2.158	
5203	14 15	5150.78	491.46	N 57 E	286.79	N 399.17 E	491.51	N 54 18 16 E	0.360	
5394	12 30	5336.58	535.61	N 57 E	310.85	N 436.22 E	535.64	N 54 31 36 E	0.916	
5565	10 30	5504.14	569.67	N 58 E	329.18	N 464.96 E	569.69	N 54 42 7 E	1.175	
5914	9 45	5847.70	630.91	N 59 E	361.26	N 517.25 E	630.92	N 55 4 9 E	0.221	

BOTTOM HOLE CLOSURE 630.92 FEET AT N 55 4 9 E

WILSON SUPERVISOR: Kent Asay

WE CERTIFY THAT THIS IS A TRUE AND CORRECT REPORT OF OUR SURVEY AND THAT IT AFFORDS A TRUE AND CORRECT REPRESENTATION OF OUR EARNINGS AS TO THE NATURE AND CONDITIONS OF THE WELL AT THE TIME THE SURVEY WAS MADE.

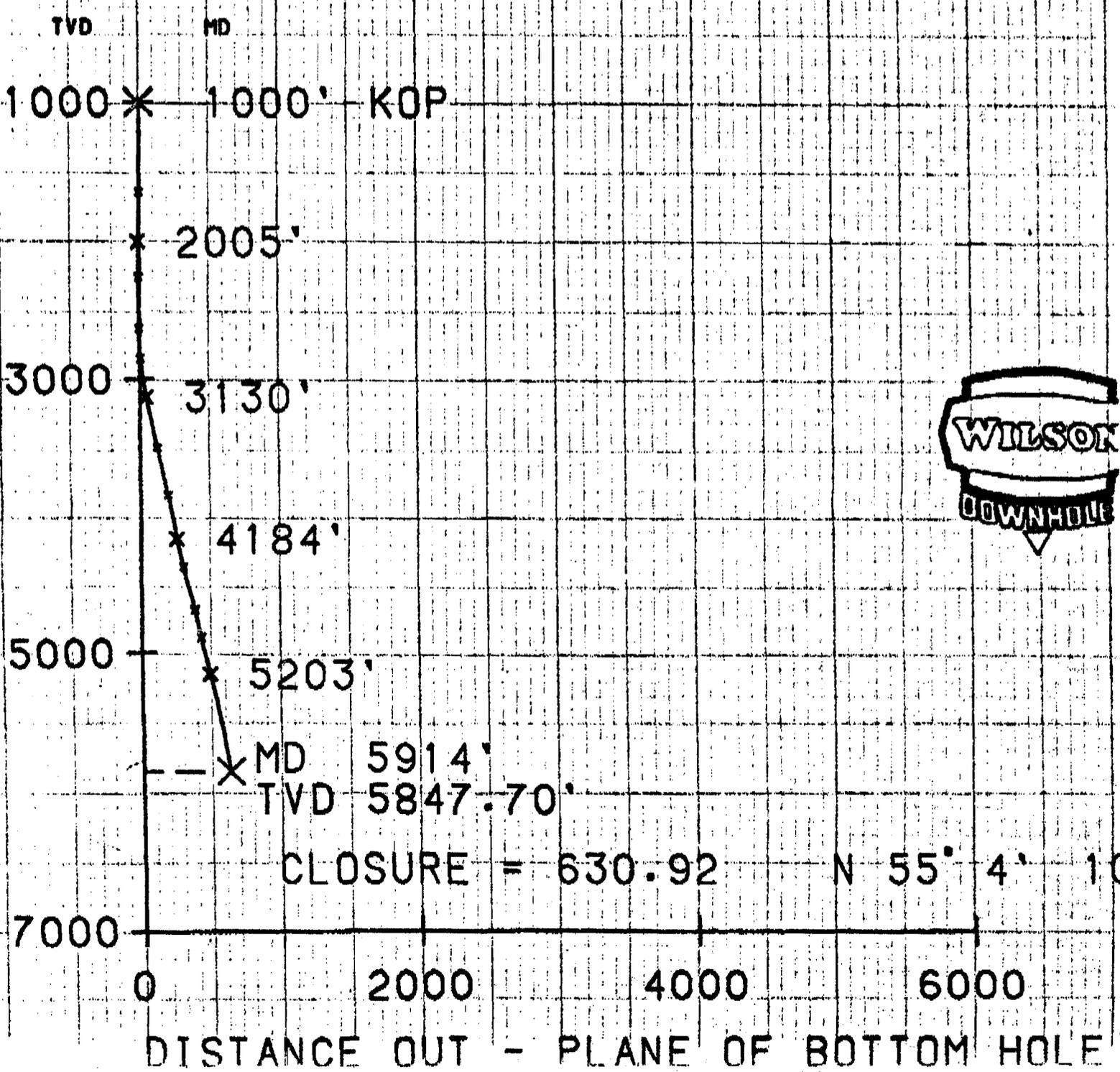
WILSON INDUSTRIES INC.
Directional Drilling Division
1-713-237-3976

Jim Wilson
10-Feb-88

LEASE #U-47970
 MUCKLESHOOT FEDERAL 15-32
 SAN JUAN COUNTY, UTAH
 WILSON DOWNHOLE DIRECTIONAL DRILLING
 WILSON SUPERVISOR •• KENT ASAY
 SINGLE-SHOT SURVEY RAN -- JAN. 17 THRU FEB. 5, 1981
 JOB NO. D8-12113

VERTICAL SECTION PLOT

SCALE - 1 INCH = 1000 FEET



B.W.A.B., INCORPORATED

LEASE #U-47970

MUCKLESHOOT FEDERAL 15-32

SAN JUAN COUNTY, UTAH

WILSON DOWNHOLE DIRECTIONAL DRILLING

WILSON SUPERVISOR •• KENT ASAY

SINGLE-SHOT SURVEY RAN -- JAN. 17 THRU FEB. 5, 1988

JOB NO. D8-12113

INITIAL SURVEY POINT

BOTTOM HOLE LOCATION

MD 1000.00 FEET

TVD 1000.00 FEET

NORTH 0.00 FEET

EAST 0.00 FEET

MD 5914.00 FEET

TVD 5847.70 FEET

NORTH 361.25 FEET

EAST 517.25 FEET

CLOSURE = 630.92'

N 55° 4' 10" E

HORIZONTAL PLOT

SCALE - 1 INCH = 100 FEET

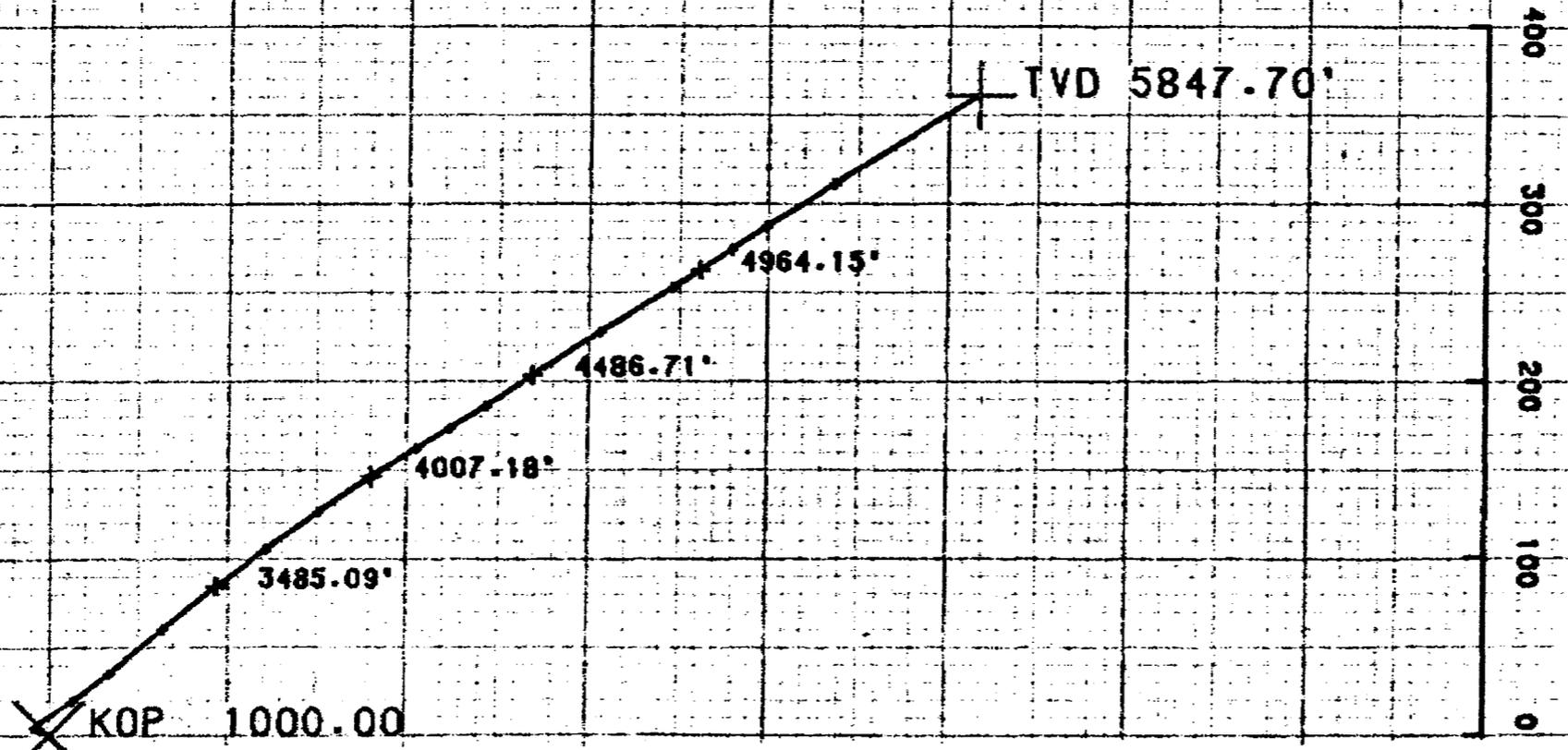
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BWAB INCORPORATED



December 2, 1988

State of Utah
Department of Natural Resources
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Center, Suite 320
Salt Lake City, Utah 84180-1203

RECEIVED
DEC 05 1988

DIVISION OF
OIL, GAS & MINING

RE: Muckleshoot Federal #15-32
SWNE Section 15, T38S-R25E
San Juan County, Utah

Gentlemen:

Enclosed please find one original and three copies of our Sundry Notice for reclamation of the referenced wellsite location. Upon approval, please return one copy to our office for our files.

If anything further is needed, or if you have any questions, please contact the undersigned.

Respectfully,

BWAB INCORPORATED

John R. Keller
Drilling and Production Manager

JRK/ep
enclosures

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

MIT IN TRIPPLICATE*
(Other instructions on reverse side)

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen wells. Use "APPLICATION FOR PERMIT" form.)

RECEIVED
DEC 05 1988
DIVISION OF
OIL, GAS & MINING

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. U-47970
2. NAME OF OPERATOR BWAB INCORPORATED		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR 1801 California St., Suite 1000, Denver, CO 80202		7. UNIT AGREEMENT NAME
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface SWNE, 2600' FEL & 1890' FNL Bottom Hole Location: NWNE, 2082.75' FEL & 1528.74' FNL		8. FARM OR LEASE NAME Muckleshoot Federal
14. PERMIT NO. API No. 43-037-31380	15. ELEVATIONS (Show whether DP, RT, GR, etc.) 5247' GL	9. WELL NO. 15-32
		10. FIELD AND POOL, OR WILDCAT Undesignated
		11. SEC., T., R., M., OR B.L. AND SURVEY OR AREA Sec. 15-T38S-R25E
		12. COUNTY OR PARISH San Juan
		13. STATE Utah

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input 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>Reclamation</u>	
(Other) <input type="checkbox"/>		(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

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

The subject location was reseeded and reclamation completed by Ray L. Atchison Construction Co., Drawer 28, Farmington, NM 87499, on October 19, 1988.

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

SIGNED John R. Keller TITLE Drilling & Production Mgr. DATE December 2, 1988

(This space for Federal or State office use)

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

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

REMIT IN TRIPLICATE*
(Other instructions on reverse side)

<p>SUNDRY NOTICES AND REPORTS ON WELLS</p> <p>(Do not use this form for proposals to drill or to deepen or shut back to a different reservoir. Use "APPLICATION FOR PERMIT" for such proposals.)</p>		<p>5. LEASE DESIGNATION AND SERIAL NO U-47970</p>
<p>1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/></p>		<p>6. IF INDIAN, ALLOTTEE OR TRIBE NAME</p>
<p>2. NAME OF OPERATOR BWAB INCORPORATED</p>		<p>7. UNIT AGREEMENT NAME</p>
<p>3. ADDRESS OF OPERATOR 1801 California St., Suite 1000, Denver, CO 80202</p>		<p>8. FARM OR LEASE NAME Muckleshoot Federal</p>
<p>4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface SWNE, 2600' FEL & 1890' FNL</p>		<p>9. WELL NO. 15-32</p>
<p>Bottom Hole Location: NWNE, 2082.75' FEL & 1528.74' FNL</p>		<p>10. FIELD AND POOL, OR WILDCAT Undesignated</p>
<p>14. PERMIT NO. API No. 43-037-31380</p>		<p>11. SEC., T., R., M., OR BLK. AND SUBVY OR AREA Sec. 15-T38S-R25E</p>
<p>15. ELEVATIONS (Show whether OF, RT, GR, etc.) 5247' GL</p>		<p>12. COUNTY OR PARISH 13. STATE San Juan Utah</p>

RECEIVED
DEC 05 1988

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>Reclamation</u>	
(Other) <input type="checkbox"/>		(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting and 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.)*

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SIGNED John R. Keller TITLE Drilling & Production Mgr. DATE December 2, 1988

(This space for Federal or State office use)

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



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Norman H. Bangerter

Governor

Dee C. Hansen

Executive Director

Dianne R. Nielson, Ph.D.

Division Director

355 West North Temple

3 Triad Center, Suite 350

Salt Lake City, Utah 84180-1203

801-538-5340

December 12, 1988

Mr. John R. Keller
BWAB Incorporated
1801 California Street, Suite 1000
Denver, Colorado 80202

Dear Mr. Keller:

RE: Approvals for Reserve Pit Reclamation

The Division of Oil, Gas and Mining recently received sundry notices which provided subsequent notification of reserve pit reclamation for the following two wells:

Taos State #41-36, Section 36, Township 37 South, Range 24 East
Muckleshoot Federal #15-32, Section 15, Township 38 South, Range 25 East

Because the sundry notices refer to work which has already transpired, the Division will not respond to or take other action with these notices other than to record and file the documents in Division records. This letter will attempt to better explain the procedures regarding submittal and approval of sundry notices.

The types of operations for which the Division requires a notice of intent include any workover or other downhole operation on a well which affects the producing zone of the well. Such activities include recompletions, plug backs, plug and abandonment, perforation and reperforation, acid stimulation, fracture stimulation, etc. The sundry notice form (DOG M form 5) should be used for submitting a notice of intent to the Division. In all cases where notice of intent is required, approval must be obtained either verbally or in writing prior to commencing such operations. After the operation has been performed, the operator should submit a subsequent notice using the sundry notice form which provides the details of the work performed and any modifications to a previously stated plan of operations.

Sundry notice forms should also be utilized for requests for approval or notification to the Division of gas venting or flaring, testing activities, leaks or spills, undesirable events, or other conservation related operation. Approval of such activities may be required contingent upon whether advance knowledge of the operation was available and whether the activity was an emergency necessitated by prudent operations. For example, gas venting or flaring normally requires prior approval; however, in cases of emergencies, reasonable amounts of gas may be vented or flared without approval as long as the Division is timely notified and the operator acts to control the emergency condition.

Page 2
Mr. John R. Keller
December 12, 1988

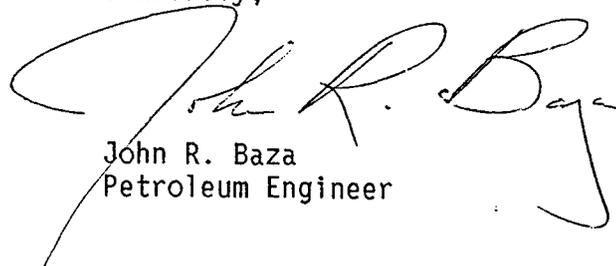
The Division does not normally require prior notice of intent and approval of other surface operations or routine maintenance activities unless such notice has been required under a condition of approval, by a formal request for action by the Division, or by order of the Board of Oil, Gas and Mining. However, if an operation causes a substantial change in production or disposition of product from a well, it would be helpful to receive a short explanation from the operator. In such circumstances, subsequent notice of well activities is adequate and sufficient. The Division will not normally respond to subsequent notification of work performed, and such documents will simply be recorded and filed in Division records.

Another situation in which sundry notice forms may be used is notification of change of operator on a well. Again, this is not a circumstance that the Division must approve; however, the Division must receive prompt notification of operator changes from both the previous operator and the new operator of any well in the state. The Division will record any operator changes upon receipt of notification from both parties, and no other response or action will be taken by the Division.

In the case of the two referenced wells, it is not necessary to provide notice of intent or obtain approval from the Division for reclamation of the reserve pits as long as no other associated downhole work is involved. For this reason, the Division will not respond to your submitted sundry notices. Any documents of this type which you might submit in the future will normally be recorded and filed as information items.

I hope this clarifies the procedures for sundry notice submittal and approval. If you have any other questions or concerns, please do not hesitate to contact me.

Sincerely,



John R. Baza
Petroleum Engineer

Attachment
cc: D. R. Nielson
R. J. Firth
Well files
OI2/36-37

MEMO TO WELL FILE

July 10, 1991

These wells are PA'd and have received a final abandonment notice from the BLM:

<u>NAME/API</u>	<u>LOCATION</u>	<u>FAN DATE</u>
Cherokee Fed 23-14 43-037-31392	Sec. 14 T. 37S R. 23E	5-20-91
8807 JV-P Havasu #1 43-037-31435	Sec. 01 T. 38S R. 23E	5-22-91
Dec Federal #1 43-037-31366	Sec. 10 T. 38S R. 24E	5-22-91
Brusheart Fed #1 43-037-31379	Sec. 17 T. 38S R. 24E	5-22-91
Black Steer Fed 7-25 43-037-31461	Sec. 25 T. 38S R. 24E	5-22-91
Wexpro-9 43-037-30604	Sec. 18 T. 36S R. 26E	6-11-91
Muckleshoot Fed 15-32 43-037-31380	Sec. 15 T. 38S R. 25E	6-11-91