



STATE OF UTAH
NATURAL RESOURCES
Water Rights

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Robert L. Morgan, State Engineer

1636 West North Temple • Suite 220 • Salt Lake City, UT 84116-3156 • 801-533-6071

November 3, 1987

CONFIDENTIAL

Marathon Oil Company
P. O. Box 2690
Cody, WY 82414

Dear Applicant:

RE: TEMPORARY APPLICATION
NUMBER 09-1541 (T62938)

Enclosed is a copy of approved Temporary Application Number 09-1541 (T62938). This is your authority to construct your works and to divert the water for the uses described.

While this approved application does give you our permission to divert and use water, it does not grant easements through public or private lands in order to gain access to the source nor to convey the water to the place of use, nor does this approval eliminate the need for such other permits as may be required by this Division or any other agency in implementing your diversion.

This application will expire November 3, 1988, and it is expected that no diversion or use of the water will be done after that date unless another proposal has been made and approved.

Your contact with this office, should you need it, is with the Area Engineer, Mark Page. The telephone number is (801)637-1303.

Sincerely,

Robert L. Morgan, P.E.
State Engineer

RLM:rc

Encl.: Copy of Approved Temporary Application

EXPLANATORY

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

Paragraph #8: Primary Source - artesian well flowing to pond

N. 50 ft. and W. 480 ft. from E $\frac{1}{2}$ Corner to Section 12, T38S, R24E, SLB&M
(7 $\frac{1}{2}$ miles North of Hatch Trading Post) Cajon Mesa Quad.

Paragraph # 12: Surface and mineral rights owned by the U. S. Government

(Use page 4 if additional explanatory is needed.)

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

RP Meahan Regulatory Coordinator
Signature of Applicant*

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

DECLARATION OF CITIZENSHIP

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

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

My commission expires:

(SEAL)

Notary Public

STATE ENGINEER'S ENDORSEMENT

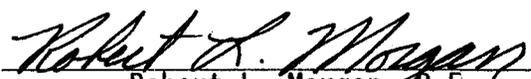
WATER RIGHT NUMBER: 09 - 1541

APPLICATION NO. T62938

1. October 23, 1987 Application received.
 2. October 29, 1987 Application designated for APPROVAL by MP and KLJ.
 3. Comments:
-
-

Conditions:

This application is hereby APPROVED, dated November 3, 1987, subject to prior rights and this application will expire on November 3, 1988.


Robert L. Morgan, P.E.
State Engineer

SAN JUAN COUNTY ROAD DEPARTMENT

Application for Right-of-Way Encroachment Permit

DATE: October 7, 1987

TO: Road Supervisor
San Juan County Road Department

Application is hereby made by: (1) Marathon Oil Company

Address (2) P. O. Box 2690, Cody, Wyoming 82414

Telephone Number: (307) 587-4961 for permission to do the following:

(3) To utilize San Juan County Roads and rights-of-ways during the construction, drilling and maintenance of our proposed McCracken Springs #4-31 well.

(4) Location: From Hatch Trading Post, Sec. 13, T39S, R24E leading Northwest to the wellsite. McCracken Springs #4-31 is located in Sec. 31, T37S, R24E, approximately 17 miles (see attached map).

CONFIDENTIAL

City _____ County San Juan State Utah

or U. S. Highway No. 220 Milepost No. N/A

in accordance with the attached plan. (5)

(6) Construction will begin on or about November 7, 1987

and will be completed on or before January 30, 1988

If the proposed installation requires breaking of the pavement, give the following information:

a. Type of pavement: N/A

b. The opening to be made will be N/A feet long
by N/A feet wide and N/A feet deep.

c. A bond in the amount of \$ N/A has been posted with

Telephone No. _____

to run of a term of three (3) years after completion of work to guarantee satisfactory performance.

(7) If this permit is granted, we agree to comply with all conditions, restriction, and regulations as contained in the "Regulations for the Control and Protection of State Highway Rights-of-Way", approved by the Utah State Road Commission on October 8, 1962, and all revisions thereto or Regulations adopted by the San Juan County Commission.

(8) In approving this application and locations of utilities, and effort will be made to approve only locations that will not be effected in the event that San Juan County changes the roadway. But, in situations in which the utility has to be moved, this moving shall be done by the utility company or paid for by the company.

(9) For any and all applications requesting authority to Vibroseise, applicants shall:

a. Provide map showing where vibroseising will take place.

b. Agree to repair any damages or replace any property damaged.

c. Take full responsibility or proper flagging and traffic control.

d. Agree that Vibroseising done in the area of dirt roads shall done on the dirt road rather than in the bar ditch to minimize damage.

e. Provide a schedule of the planned work and estimated dates of completion.

f. Attach written permission form all adjacent fee-title owners.

g. The San Juan County Commission has authorized the San Juan County Road Superintendent (or his Assignees) to issue permits.

(10) San Juan County can only grant permission to the extent that the County has the authority to do so and the permission granted hereunder is limited to the interest of authority actually owned by San Juan County and no warranties of ownership or authority to grant permission is expressed or implied by the granting of this permit.

R P Melan
BY:
Regulatory Coordinator
TITLE

To be filled in by Road Supervisor.

(1) Permit should be granted

Permit should not be granted

(2) Additional requirements which should be imposed.

M A Hingstatter
ROAD SUPERVISOR

INSTRUCTIONS

(1) *Application for this permit should be made in duplicate by whoever will actually do the work whether it be the owner or a contractor.

(2) Mailing address of applicant.

(3) State fully and completely the type or installaion, type of construction, width, thickness, drainage data, etc., where applicable. If pole line, give the following information: number of poles, total length of line, type of wire, character of service, vertical clearance over roadway, and voltage of power line.

(4) If pipe line or buried cable, give the following information: Type of service, size and length of line, depth of trench, kind of pipe, (sewer, gas, oil, water supply, etc.) or conduit, and if pipe is to be driven or if pavement will be broken. All fluid lines requires encasement with suitable material. The size and length of encasement shall be satisfactory to the State Department of Transportation, San Juan County Road Supervisor or his agent.

(5) Give distance from some geographical point such as intersecting highways, city, or coporate limits. Give city, county, and state or U. S. route number.

(6) Attach two (2) copies of a plan showing proposed location of structures with reference ot pavement and right-of-way lines. If installation crosses the highway, show cross section of present roadway and proposed installation.

(7) Give anticipated dates for beginning and for completion of proposed installation.

Note: A fee of five (5) dollars will be charged for all Right-of-Way Encroachments Permits, except those obtained for pole lines, and buried cable lines. This Permit fee, where applicable, should be submitted with the application. The costs of inspection are included in the Right-of-Way Encroachment Permit fee, except for pole lines, pipe lines, and buried cable lines which shall be billed for the inspection.



**Marathon
Oil Company**

P.O. Box 2690
Cody, Wyoming 82414
Telephone 307/587-4961

March 11, 1988

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

CONFIDENTIAL

RE: Exception to Location for the Proposed Well McCracken Spring #4-31, Bottom Hole Located SW $\frac{1}{4}$ NE $\frac{1}{4}$ 2130' FNL, 1500' FEL of Section 31, T37S, R24E, Surface Located 2365' FNL, 1320' FEL of Section 31, T37S, R24E, San Juan County, Utah

Gentlemen:

Marathon Oil Company requests administrative approval from the Division for an exception to the locating and siting requirements of R615-3-2 in association with the above referenced well.

The well, McCracken Spring #4-31 is proposed to be drilled with the bottom hole being in the SW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 31, T37S, R24E. Presently an existing well, McCracken Spring #1-31, which is owned and operated by Marathon Oil Company is located in the adjacent quarter quarter section, the SE $\frac{1}{4}$ NE $\frac{1}{4}$. The proposed bottom hole location is approximately 561' from the existing #1-31 well.

Marathon Oil Company is the owner and operator of all lands within a 460' radius of the proposed McCracken Spring #4-31 well. Because of this, administrative approval is being requested as set forth in R615-3-3. Please refer to Attachment '1' for further clarification.

Your approval of this request would be greatly appreciated.

Sincerely,

MARATHON OIL COMPANY

A handwritten signature in cursive script that reads "R P Meabon".

R. P. Meabon
Regulatory Coordinator
Rocky Mountain Region

RPM/FMK/rrm

Attachment

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

2. NAME OF OPERATOR
 Marathon Oil Company

3. ADDRESS OF OPERATOR
 P. O. Box 2690, Cody, Wyoming 82414

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)
 2365' FNL & 1320' FEL

2130' FNL & 1500' FEL

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 Approximately 11 miles Northwest of Hatch Trading Post

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)
 Bottom Hole 510'

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
 587'

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 5684' Ungraded Ground Level

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8"	36#	2250'	Sufficient to Surface
7-7/8"	5-1/2"	15.5#	6400'	Sufficient to Surface Casing Shoe

Marathon Oil Company proposes to drill the McCracken Spring #4-31 well to an estimated TD of 6400' (Akañ Formation). A 12-1/4" hole will be drilled to 2250' and 2250' of new 9-5/8", 36#, K-55, ST&C casing will be run and cemented to surface. A 7-7/8" hole will then be drilled to a TD of 6400' and 6400' of 5-1/2", 15.5#, K-55, LT&C casing will be run and cemented to approximately 2150'. The productive zones or zone will then be perforated, treated as necessary and placed on production.

BLM-Orig & 3--cc: SUDOGM-3, WRF, FMK, Drilling-3, WTR, Title & Contract (Houston)

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 RPM TITLE Regulatory Coordinator DATE March 11, 1988

(This space for Federal or State office use)

PERMIT NO. 43-037-31393 APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

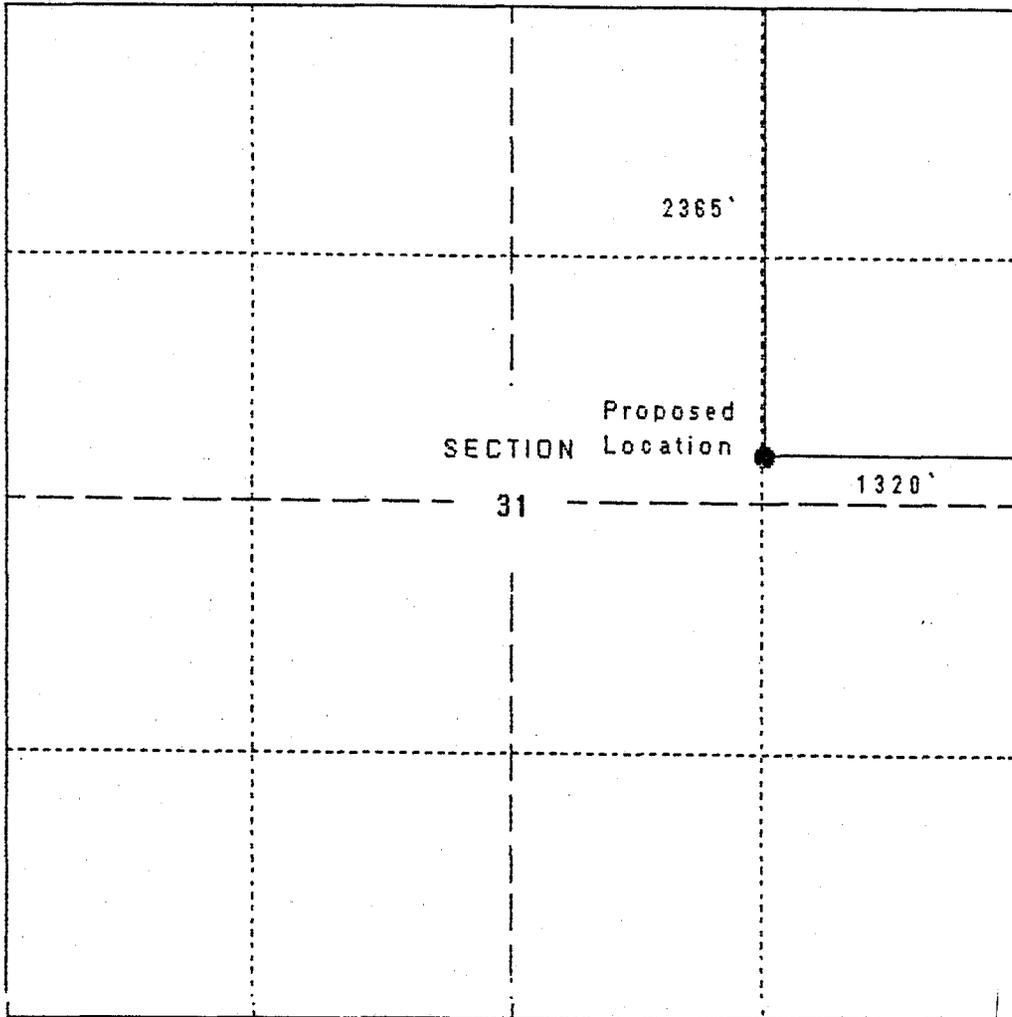
CONDITIONS OF APPROVAL, IF ANY: _____

APPROVED BY THE STATE
 OF UTAH DIVISION OF
 OIL, GAS, AND MINING
 DATE 3-18-88
 BY John R. Dyer
 WELL SPACING: 6x5-3-3

*See Instructions On Reverse Side

WELL LOCATION PLAT

CONFIDENTIAL



Scale 1"=1000'

WELL LOCATION: MARATHON McCracken Springs No. 4-31 Alternate

Located 2365 feet South from the North line and 1320 feet West from the East line of Section 31, Township 37 South, Range 24 East, Salt Lake Meridian.

Ground elevation determined at 5684 feet based on Well No. 1-31.

This is to certify that this plat represents a survey made by me or under my supervision and that it is correct to the best of my belief and knowledge.

Louis Jobe

Louis Jobe
Registered Land Surveyor



Exhibit 'B'

MARATHON OIL COMPANY
CODY, WYOMING

WELL LOCATION PLAT
McCracken Springs No 4-31 Alternate
Sec. 31, T37S, R24E, S.L.M.
San Juan County, Utah

CLARK-REED&ASSOC. Dec 21, 1987
Durango, Colorado File No 87007

MOAB DISTRICT

CONDITIONS OF APPROVAL FOR PERMIT TO DRILL

Company: Marathon Oil Company Well Name: McCracken Spring #4-31

Location: Section 31, T. 37 S., R. 24 E. Lease No.: U-51846

2365' FNL 1320' FEL

All lease and/or unit 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 subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

CONFIDENTIAL

A. DRILLING PROGRAM

1. Surface Formation and Estimated Formation Tops: Refer to Item #2 of attached "Drilling Operations Plan".
2. Estimated Depths at Which Oil, Gas, Water, or Other Mineral Bearing Zones are Expected to be Encountered:

	<u>Formation</u>	<u>Zone</u>
Expected oil zones:	<u>Refer to Item 3 of attached "DOP".</u>	
Expected gas zones:	<u>Refer to Item 3 of attached "DOP".</u>	
Expected water zones:	<u>Refer to Item 3 of attached "DOP".</u>	
Expected mineral zones:	<u>Refer to Item 3 of attached "DOP".</u>	

"DOP" - Drilling Operations Plan

All fresh water and prospectively valuable minerals (as described by the BLM at onsite) encountered during drilling, will be recorded by depth, cased, and cemented. All oil and gas shows will be tested to determine commercial potential.

3. Pressure Control Equipment: Refer to Item 7 of the attached "Drilling Operations Plan".

BOP systems will be consistent with API RP 53. Pressure tests will be conducted 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 operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs.

4. Casing Program and Auxiliary Equipment: Refer to Item 6A and 9A of the attached "Drilling Operations Plan".

Anticipated cement tops will be reported as to depth, not the expected number of sack.

5. Mud Program and Circulating Medium: Refer to Item 8 of the attached "Drilling Operations Plan".
6. Coring, Logging and Testing Program: Refer to Item 4 of the attached "Drilling Operations Plan".

CONFIDENTIAL

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 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, samples (cuttings, fluids, and/or gases) will be submitted to the District Manager.

7. Abnormal Conditions, Bottom Hole Pressures and Potential Hazards: Refer to Item 5 of the attached "Drilling Operations Plan".
8. Anticipated Starting Dates and Notifications of Operations:

The operator will contact the San Juan Resource Area at 801-587-2141, 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 to 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 24 hours before spudding. A Sundry Notice (Form 3160-5) will be sent within 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.

CONFIDENTIAL

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.

If a replacement rig is planned for completion operations, a Sundry Notice (Form 3160-5) to the 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, then the District Manager will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communication, not later than 5 business days 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 for 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 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 for 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 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 the 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: Federal Well Number, location by 1/4 1/4 section, township and range, Lease number.

A first production conference will be scheduled within 15 days after receipt of the first production notice. The San Juan Area Manager will schedule the conference.

Other: _____

CONFIDENTIAL

The following may be inspected and or witnessed:

1. The cementing and testing of surface casing, testing BOP's.
2. (Dry Hole) Setting and testing of surface casing shoe plug.
3. (Depleted Producer) The setting and testing of plugs across producing horizon and if applicable the surface casing shoe plug and/or annulus (casing to formation) squeeze jobs.

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 (801) 259-6111.

MARATHON OIL COMPANY
McCracken Spring #4-31

CONFIDENTIAL

Drilling Operations Plan
Surface Location: 2365' FNL, 1320' FEL
Sec. 31, T37S, R24E
San Juan County, Utah
Elevation: 5684'

1. Geologic name of surface:

Jurassic Morrison Formation

2. Estimated tops of important geologic markers:

<u>Formation</u>	<u>Depth (K.B.)</u>	<u>Depth (From Sea Level)</u>
Entrada	1023'	+4661'
Navajo	1230'	+4454'
Kayenta	1679'	+4005'
Wingate	1869'	+3815'
Chinle	2130'	+3554'
Shinarump	2930'	+2754'
Moenkopi	2985'	+2699'
Cutler	3050'	+2634'
Honaker	4890'	+ 794'
Paradox	5830'	- 146'
U. Ismay	5984'	- 300'
Hoven Weep	6133'	- 449'
L. Ismay	6178'	- 494'
Gothic	6224'	- 540'
Desert Creek	6257'	- 573'
L. Desert Creek	6306'	- 622'
Chimney Rock	6332'	- 648'
Akah	6352'	- 668'

3. Estimated depths of anticipated water, oil, gas or other mineral bearing formations:

<u>Formation</u>	<u>Depth (K.B.)</u>	<u>Possible Content</u>
Upper Ismay	6010'	Gas
Upper Ismay	6040'	Oil
Desert Creek	6257'	Gas-Oil

4. Sample, logging, testing, and coring program:

Mud log from 5600' to TD.

DLL-GR-Cal from TD to surface casing with GR to surface.

FDC-CNL-GR-Cal from TD to 5400'.

Schlumberger FMS log from TD to top Upper Ismay.

4. Sample, logging, testing, and coring program: (Continued)

DST's may be run in the Desert Creek and Upper Ismay if mud log data is encouraging.

No cores are anticipated.

Samples will be caught, bagged, and dried in 30' intervals from 4500' to 5600' and then in 10' intervals to TD or as specified by the Company Representative.

5. Anticipated pressures and temperatures:

Maximum anticipated bottom hole pressure is 2030 psi.

Maximum anticipated bottom hole temperature is 134°F.

6a. Casing program:

<u>Min. Hole Size</u>	<u>Casing O.D.</u>	<u>Grade</u>	<u>Weight</u>	<u>Setting Depth</u>	<u>New or Used</u>	<u>Conn.</u>
20"	16"	X-42	42.0#	80'	New	PE
12 1/4"	9 5/8"	K-55	36.0#	2,250'	New	ST&C
7 7/8"	5 1/2"	K-55	15.5#	6,350'	New	LT&C

6b. Cement Program:

9 5/8" Surface Casing

Casing equipment will include a float shoe, an insert float and centralizers placed in the middle of the shoe joint and at the top of every third joint to surface. Waiting on cement time will be eight hours; casing is not to be disturbed until cement has fully set.

Cement Height: 2250' to surface

The casing will be cemented with 600 sacks blended light cement followed by 265 sacks of blended Class 'G' cement. A mud flush spacer will precede the cement. If cement column falls, a 1" top job will be performed.

Lead Slurry: 1750' x .3132 ft³/ft. + 100% excess = 1096 ft³

Weight:	12.7 ppg
Yield:	1.84 ft ³ /sack
Mix Water:	9.9 gal/sack
Min. Cement Required:	600 sacks

CONFIDENTIAL

6b. Cementing program: (Continued)

Tail Slurry: $500' \times .3132 \text{ ft}^3/\text{ft} + 100\% \text{ excess} = 313 \text{ ft}^3$

Weight:	15.6 ppg
Yield:	1.18 ft ³ /sack
Mix Water:	5.2 gal/sack
Min. Cement Required:	265 sacks

5½" Production Casing

Casing equipment will include a float shoe, a float collar and centralizers at one per joint from TD to 200' above the Ismay and spaced every third joint to surface casing. Cable type scratchers will be run every 15' from TD to 200' above the Ismay. After cementing, the casing will be landed in the head with the full weight of the casing string set in the slips.

Casing will be lowered into the hole slowly enough to avoid excessive surge pressures. Mud volumes/flows will be monitored throughout the job at all times. Hole conditions permitting, the mud will be conditioned to optimum cementing rheology while circulating casing prior to cementing. The casing will be reciprocated during placement of the cement if hole conditions permit.

Cement Height: 4250' Cement Top: 2150'

The production casing will be cemented with 430 sacks of light-weight cement followed by 110 sacks of Class 'B'. Additives will be based on pilot tests.

The actual volume will be calculated from the caliper log + 25% excess to place the cement top inside the surface casing.

Lead Slurry: $3650' \times .1733 \text{ ft}^3/\text{ft} + 25\% \text{ excess} = 790 \text{ ft}^3$

Weight:	12.7 ppg
Yield:	184 ft ³ /sack
Mix Water:	9.9 gal/sack
Min. Cement Required:	430 sacks

Tail Slurry: $600' \times .1773 \text{ ft}^3/\text{ft} + 25\% \text{ excess} = 130 \text{ ft}^3$

Weight:	15.6 ppg
Yield:	1.18 ft ³ /sack
Mix Water:	5.2 gal/sack
Min. Cement Required:	110 sacks

7. B.O.P. specifications and testing:

BOP equipment will include pipe and annular preventer. All equipment while drilling below surface casing will have a minimum working pressure of 3,000 psi. The accumulator will be of sufficient size to open and close all components without using the pump. The minimum testing requirements will be as follows:

- a) All ram-type preventers will be tested to the rated working pressure of the stack or to 70% of the internal yield of the casing, whichever is less.
- b) The annular-type preventer will be tested to 50% of its rated working pressure.
- c) Tests will be run at the time of installation and following repairs, prior to drilling out of each casing shoe, and at least every 30 days.

8. Mud Program:

<u>From</u>	<u>To</u>	<u>Type Mud</u>	<u>Weight</u>	<u>Vis</u>	<u>Oil %</u>	<u>Water Loss</u>
0'	2250'	Water/Gel	8.5	36-40	0	No Control
2250'	5000'	Chem-Gel	8.5-9.0	38-41	0	15-20
5000'	TD	Chem-Gel	8.5-9.0	41-45	0	12-15
Logging		Chem-Gel	8.5-9.0	50-55	0	12-15
Cementing		Chem-Gel	8.5-9.0	32-36	0	12-15

Treatment of the anhydrite section above the Ismay may be necessary to maintain good mud qualities.

9. Type of drilling tools and auxiliary equipment:

- A. A kelly cock of 3000 psi WP will be used.
- B. A pit volume indicator, mud flow indicator, and pump pressure recorder will be used.
- C. A 3000 psi working pressure full opening safety valve will be available to stab into the drill pipe when necessary if the kelly is not in the string.
- D. Casing strings - "All casing strings shall be pressure tested (0.2 psi/ft. or 1000 psi, whichever is greater) prior to drilling the plug after cementing; test pressure will not exceed 70% of the casing's internal yield pressure.
- E. A drilling rate recorder calibrated to record drilling time for each one foot interval will be used.
- F. A leak-off test on the 8 5/8" casing shoe will be carried out prior to drilling the 7 7/8" hole section.

10. Deviation Control:

Surface Location: 2365' FNL, 1320' FEL, Sec. 31, T37S, R24E
Bottomhole Location: 2130' FNL, 1500' FEL, Sec. 31, T37S, R24E

<u>From</u>	<u>To</u>	<u>Maximum Distance Between Surveys</u>	<u>Maximum Change Per 100' of Depth</u>
0'	2250'	250'	1°
2250'	TD	500'	2°

The target has a 50' radius at a depth of 5984'. The well will be a directional well. The wellbore will be monitored with directional surveys. Offset information indicates little natural drift.

Note: The South edge of the 50' radius target touches a "hard" boundary. The "hard" boundary is 460' north of and parallel to the lease south line.

11. The anticipated duration: 20 Days.

REGION APPROVAL

Approved _____ Date _____

Originator: _____

THC: Tom Toupin 10 March 88

FFS: F.A. Fender 3/10/88

RDWin: _____

DRT: _____

WTR: _____

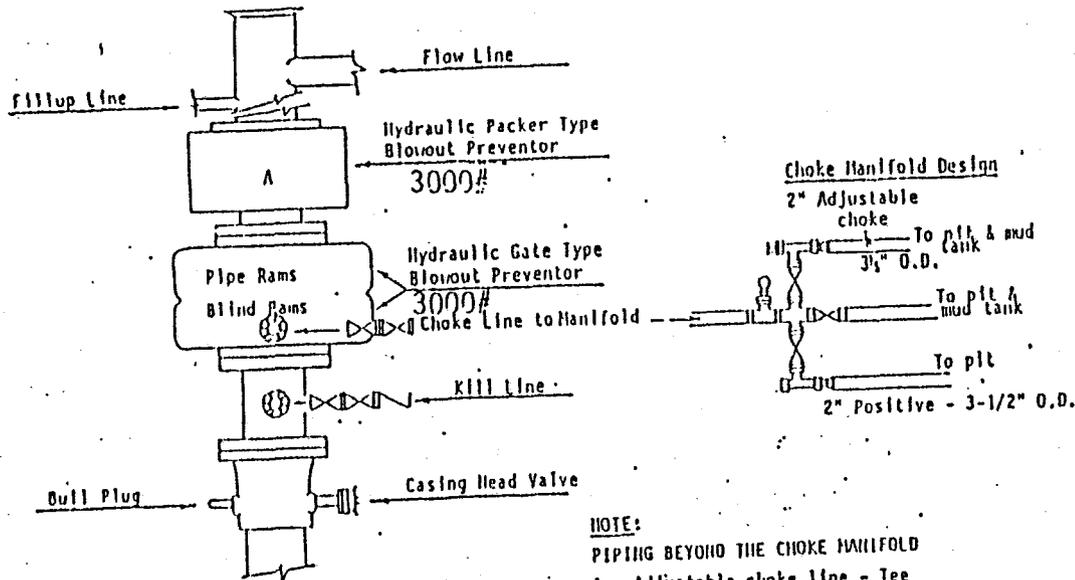
DES: _____

JLM: _____

RJD: _____

JRK: _____

1. Light Plant will be located a minimum of 125' from the well.
2. Rig will be equipped with a vapor proof lighting system. A switch panel will be located on rig floor to provide sufficient circuits for maintaining light on rig floor and under the substructure during blowout. All other lights will be out in the event of a blowout.
3. Engine exhausts will be horizontal and equipped with a remote operated spray system.
4. Pump and drawworks engines will have a remote ignition 'kill' system readily accessible to the driller.
5. All vehicles will be parked at least 125 feet from the well unless supplying rig material.
6. The Contract Pusher will instruct each man of his duties in case of an emergency and inform Marathon of these duties.
7. The Contract Pusher on each rig will have blowout preventer and fire drills with each crew once each week and note same in Marathon Log Book.
8. The Contract Pusher will instruct derrickman in the use of the Geronimo.
9. Gate type blowout preventers and choke manifold valves will be operated on each trip out for a new bit and so noted in the log book. All valves will be equipped with handles.
10. Blowout preventers will stay in place and be operable until casing is cemented and packing and slips are in place.
11. The choke line will be cleaned from the BOP's to the pit immediately under surface and once a week thereafter.
12. Manual handles must be on blowout preventers.
13. The pipe from the blowout preventer to the choke manifold will be kept free of all sharp bends.
14. The choke manifold will be out from under the rig floor and braced.
15. Choke lines will run straight from rig and be tied down.
16. The choke lines will be run to the reserve pit and/or mud tank as indicated on the attached Exhibit.



NOTE:

PIPING BEYOND THE CHOKER MANIFOLD

1. Adjustable choke line - Tee and two valves for flow to either the mud tank or pit.
2. Full opening line - Tee and two valves for flow to either the mud tank or pit.

CONFIDENTIAL

1. Blowout preventors, master valve, plug valves, and all fittings must be in good condition. Use new API seal rings.
2. All fittings (gates, valves, etc.) to be of equivalent pressure rating as preventors. Valves to be flanged and at least 2" unless otherwise specified. Valves next to BOP to be plug type and nominal 3".
3. Equipment through which bit must pass shall be as large as the inside diameter of the casing that is drilled through.
4. Safety valve (OMSCO or equivalent) must be available on rig floor at all times and with proper connections. The ID of safety valves should be as great as ID of tool joints or drill pipe.
5. Kelly safety valve installed, same working pressure as BOP.
6. All lines and controls to preventors must be connected and tested before drilling out of surface pipe.
7. BOP's must be fluid operated, complete with accumulator. Controls may be either on floor or ground near steps from rig floor.
8. Fillup line tied to drilling nipple, the connection must be below and approximately 90° to the flow line.
9. Gauge will be installed for testing but removed while drilling.
10. Casinghead and casinghead fittings to be furnished by Marathon Oil Company.
11. Chokes must be adjustable and positive.
12. One side of casinghead may be bull plugged.
13. The pipe rams and the annular preventer will be function tested daily and blind rams will be tested on trips and recorded in the drlg. log.

WHEN DRILLING -- USE:

- Top preventor -- Drill pipe rams.
- Bottom preventor -- Blinds rams.

WHEN RUNNING CASING -- USE:

- Top preventor -- Casing rams.

THIRTEEN POINT SURFACE USE PLAN
McCracken Spring #4-31

1. Existing Roads:

- a. Location of proposed well in relation to town or other reference point: See vicinity map Exhibit 'A' and the well location in relation to Hatch Trading Post, Utah.
- b. Proposed route to location: County roads, see vicinity map Exhibit 'A'.
- c. Plans for improvement and/or maintenance of existing roads: The roads will be maintained in as good or better condition than they now exist.
- d. An encroachment permit was obtained from the San Juan County Road Dept., (801) 587-2231, ext. 43.
- e. Other: Permit is attached.

2. Planned Access Roads:

- a. The maximum total disturbed width will be 30 feet for 131 feet.
- b. Maximum grade: 0% to 5%
- c. Turnouts: As needed
- d. Location (centerline): Flagged during onsite.
- e. Drainage: One 18" culvert will be placed where the new access road will leave the McCracken Spring #1-31 location.
- f. Surface Materials: If access is utilized during wet winter weather, road surfacing may be required to prevent road maintenance problems.
- g. Other: Pit run will be used for road surfacing.

CONFIDENTIAL

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 by the San Juan Area Manager.

The access road will be water barred or brought to Class III Road Standards within 60 days of dismantling of the drill rig. If this time frame cannot be met, the San Juan Area Manager will be notified so that temporary drainage control can be installed along the access road.

The Class III Road Standards which ensure drainage control over the entire road through the use of natural, rolling topography; ditch turnouts; drainage dips; outsloping; crowning; low water crossings; and culverts will be determined at the appropriate field inspection.

CONFIDENTIAL

3. Location of Existing Wells:

See Exhibit 'C'.

4. Location of Tank Batteries and Production Facilities:

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. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The color will be Sandstone.

If a tank battery is constructed on this lease, it will be surrounded by a dike of sufficient capacity and contain 1-1/2 times the storage capacity of the largest tank within 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 measurement, or commingling on-lease or off-lease will have prior written approval from the District Manager.

Gas meter runs for each 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.

The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place before any deliveries. Tests for meter accuracy will be conducted monthly for the first 3 months on new meter installations and at least quarterly thereafter. 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.

5. Location to Type of Water Supply:

All water needed for drilling purposes will be obtained from: A private source (Perkin's Ranch), refer to Exhibit 'C' for water haul route.

Use of water for this operation will be approved by obtaining a temporary use permit from the Utah State Engineer, (801) 637-1303 and by receiving permission from the land owner or surface management agency to use the land containing the water source.

6. Source of Construction Material:

Pad Construction material will be obtained from: Native material

The use of materials under BLM jurisdiction will conform to 43 CFR 3610.2-3.

7. Methods of Handling Waste Disposal:

The reserve pit will be lined with commercial bentonite sufficient to prevent seepage. At least half of the capacity will be cut. However, if determined by the dirt contractor that the pit needs line, it will be line with bentonite.

Three sides of the reserve pit will be fenced with four strands of barbed wire before drilling starts. The fourth side will be fenced as soon as the drilling is completed. The fence will be kept in good repair while the pit is drying.

A trash pit or cage will be constructed near the mud tanks and doug at least six feet into solid undisturbed material. It will be totally enclosed with a fine wire mesh before the rig moves in. The road and pad will be kept litter free.

A burning permit is required for burning trash between May 1, and October 31. This can be acquired by notifying the San Juan County Sheriff at (801) 587-2237.

Produced waste water will be confined to an unlined pit for a period not to exceed 90 days after initial production. During the 90 day period an application for approval of a permanent disposal method on location, along with the required water analysis, will be submitted for the District Manager's approval pursuant to Onshore Oil and Gas Order No. 3 (NTL-2B).

8. Ancillary Facilities:

Camp facilities will not be required.

9. Well Site Layout:

The reserve pit will be located: See Exhibit 'J'

Trees will be piled on the uphill side of the location. Topsoil along the access will be reserved in place.

Access to the well pad will be from: A new access road from the McCracken Spring #1-31 location leading to the new well site. The new well site will be entered from the East.

Presently an approximate area of the well pad (60' x 350') falls outside the archaeological cleared area which was chosen for the original well-site. If artifacts are found in this unsurveyed area the actual footages for this well may change slightly to eliminate archaeological disturbance.

10. Reclamation:

- a. Immediately on completion of drilling, all trash and debris will be collected from the location and surrounding area. All trash and debris will be disposed of in the trash pit and will then be compacted and buried under a minimum of two feet of compacted soil.
- b. The operator/holder or his contractor will contact the San Juan Resource Area office in Monticello, Utah (801) 587-2141, 48 hours before starting reclamation work that involves earthmoving equipment and upon completion of restoration measures.
- c. Before any dirt work to restore the location takes place, the reserve pit must be completely dry.
- d. All disturbed areas will be recontoured to blend as nearly as possible with the natural topography. This includes removing all berms and refilling all cuts.
- e. The stockpiled topsoil will be spread evenly over the disturbed area. All disturbed areas will be ripped 12 inches deep with the contour.
- f. Water bars will be build as follows to control erosion.

<u>Grade</u>	<u>Spacing</u>
2%	Every 200 feet
2-4%	Every 100 feet
4-5%	Every 75 feet
5+%	Every 50 feet

- g. Seed will be broadcast between October 1 and February 28 with the following prescription. A harrow or similar implement will be dragged over the area to assure seed cover.

<u>2</u>	lbs/acre Indian ricegrass (<u>Oryzopsis hymenoides</u>)
	lbs/acre Galleta (<u>Hilaria jamesii</u>)
<u>4</u>	lbs/acre crested wheatgrass (<u>Agropyron desertorum</u>)
	lbs/acre Western wheatgrass (<u>Agropyron smithii</u>)
	lbs/acre Alkali sacaton (<u>Sporobolus airoides</u>)
	lbs/acre Sand dropseed (<u>Sporobolus cryptandrus</u>)
<u>3</u>	lbs/acre Fourwing saltbrush (<u>Atriplex canescens</u>)
	lbs/acre Shadscale (<u>Atriplex confertifolia</u>)
	lbs/acre Green ephedra (<u>Ephedra viridis</u>)
	lbs/acre Cliffrose (<u>Cowania mexicana</u>)

2 lbs/acre Desert bitterbrush (Purshia glauca)
 lbs/acre Winterflat (Eurotia lanata)
 lbs/acre Globemallow (Sphaeralcea ambigua)
 lbs/acre Wild sunflower (Helianthus annuus)
 lbs/acre

- h. After seeding is complete, the stockpiled trees will be scattered evenly over the disturbed area. The access will be blocked to prevent vehicular access.
- i. The reserve pit and the portion of the location and access road not needed for production or production facilities will be reclaimed as described in the reclamation section. Enough topsoil will be kept to reclaim the remainder of the location at a future date. This remaining stockpile of topsoil will be seeded in place using the prescribed seed mixture.
11. Surface Ownership: BLM
Mineral Ownership: Federal
12. Other Information: Oil and or gas flowlines will parallel the new access road to the McCracken Spring #1-31 location. Facilities at the McCracken #1-31 site will be utilized for production from the proposed well (The flowlines will be buried a minimum of 30").

There will be no change from the proposed drilling and/or work-over 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 and 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 the 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.

Your contact with the District Office is: Steve Jones
Office Phone: (801) 259-6111, Address: P. O. Box 970, Moab Ut 84532

Resource Area Manager's address and contacts:
Address P. O. Box 7, Monticello, UT 84532

Your contact is: Richard McClure
Office Phone: (801) 587-2141

13. Lessee's or Operator's Representation and Certification

Representative

Name: Fred Schneider
Address: P. O. Box 2690, Cody, Wyoming 82414
Phone No.: (307) 587-4961

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 currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Marathon Oil Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

3/11/88
Date

R P Meaban Regulatory Coordinator
Name and Title

*ON-SITE - Original Location

DATE: September 28, 1987

PARTICIPANTS:

<u>Jim Perkins & Lou Jobe - Surveyors</u>	<u>Bob Coleman - Marathon</u>
<u>Patrick Harden - Archaeologist</u>	<u>Joe Icenogle - Marathon</u>
<u>Howard Hughes - Dirt Contractor</u>	<u>Marvin Blakesley - Marathon</u>
<u>Richard McClure - BLM</u>	<u>Frank Krugh - Marathon</u>
<u>Jim VanGilder - Marathon</u>	<u>Jim Barto - Marathon</u>

**The location for this well was moved approximately 258' SE 45° from the original location. It is understood that another onsite with Marathon Oil Company present is not required.

R 23 E R 24 E



Marathon Oil Company

P.O. Box 2690
Cody, Wyoming 82414
Telephone 307/587-4961

McCracken Spring #4-31

Section 31, T37S, R24E
San Juan County, Utah

- DRY HOLE
- PRODUCING OIL WELL

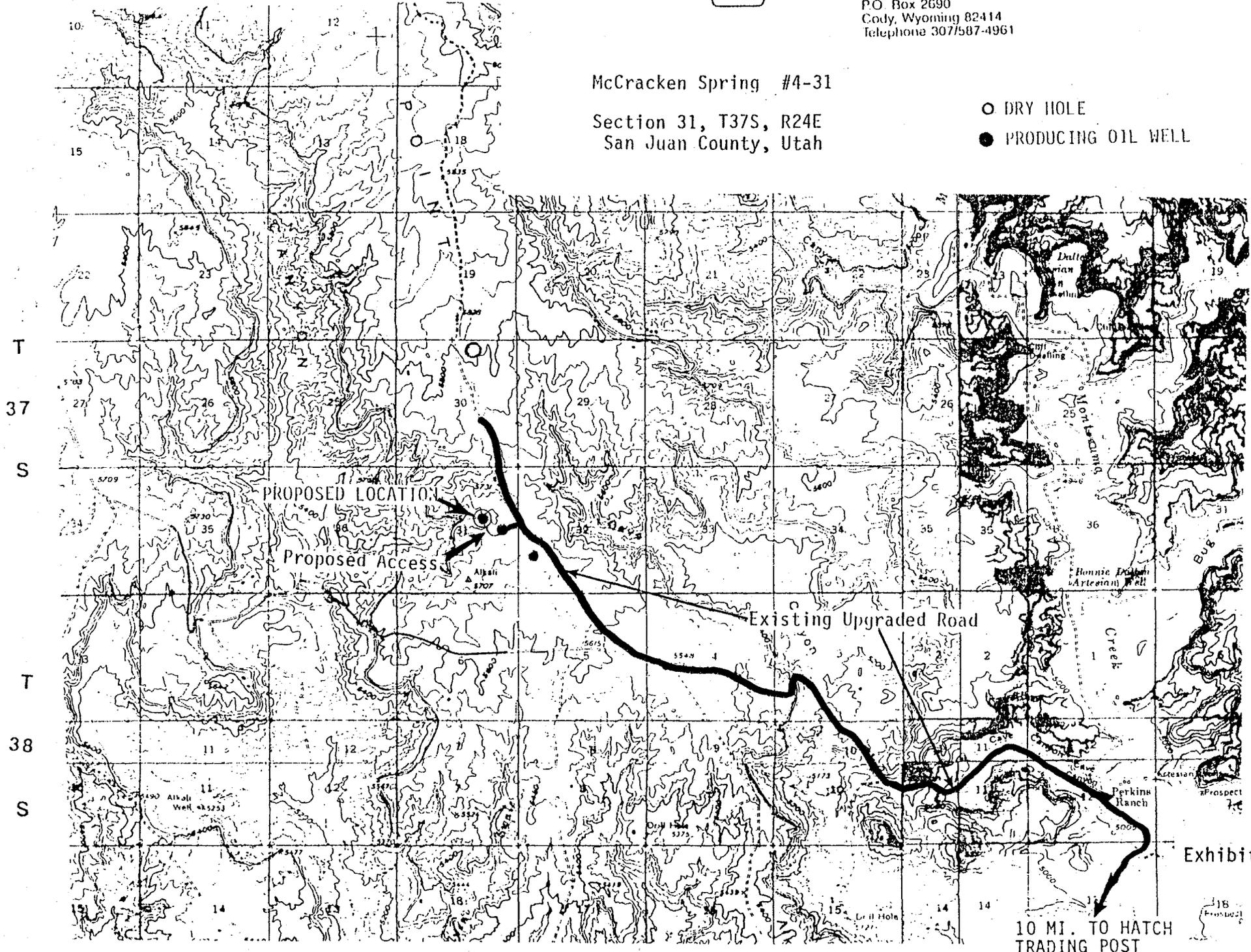


Exhibit 'A'

10 MI. TO HATCH
TRADING POST

CONFIDENTIAL

R 23 E R 24 E



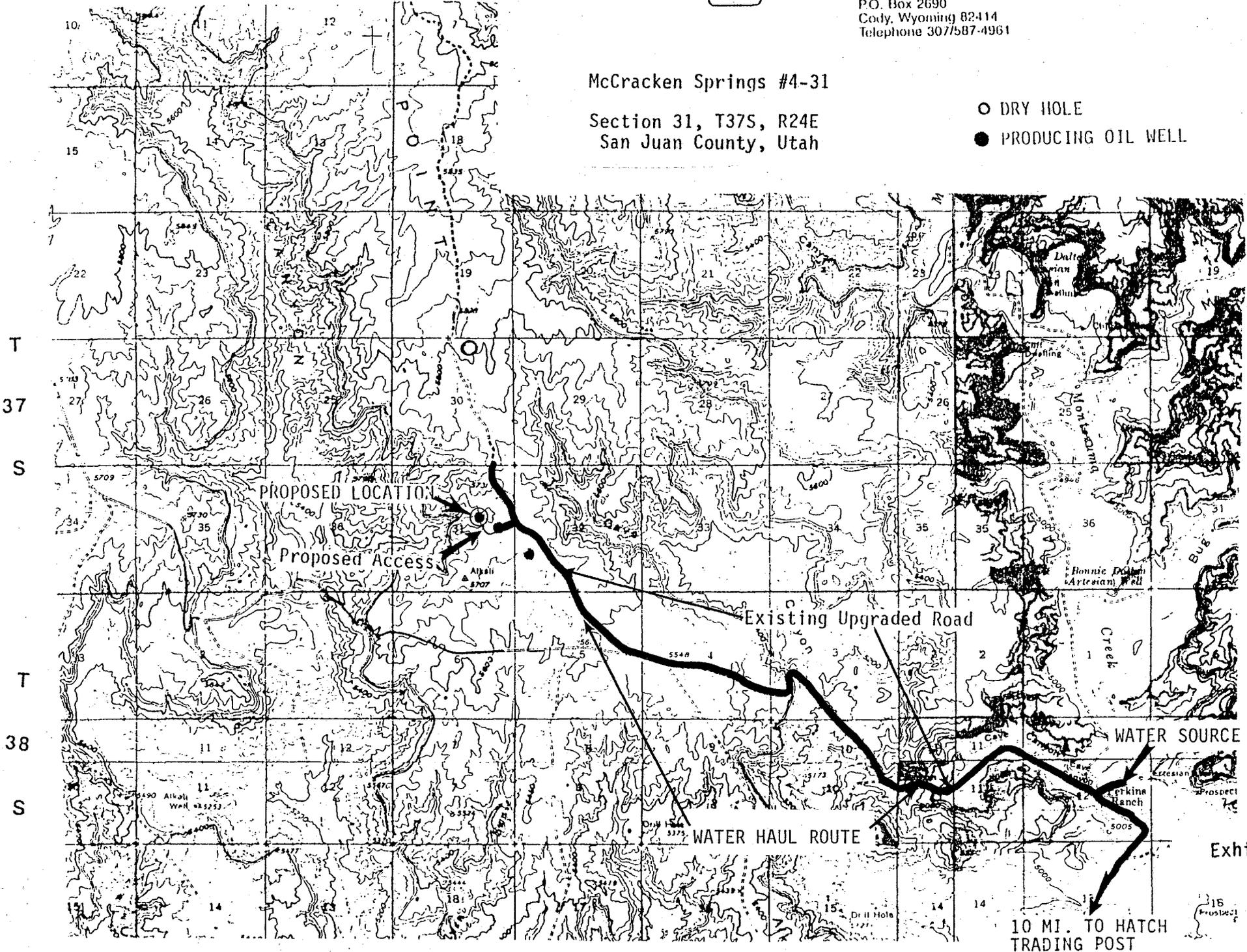
Marathon Oil Company

P.O. Box 2690
Cody, Wyoming 82414
Telephone 307/587-4961

McCracken Springs #4-31

Section 31, T37S, R24E
San Juan County, Utah

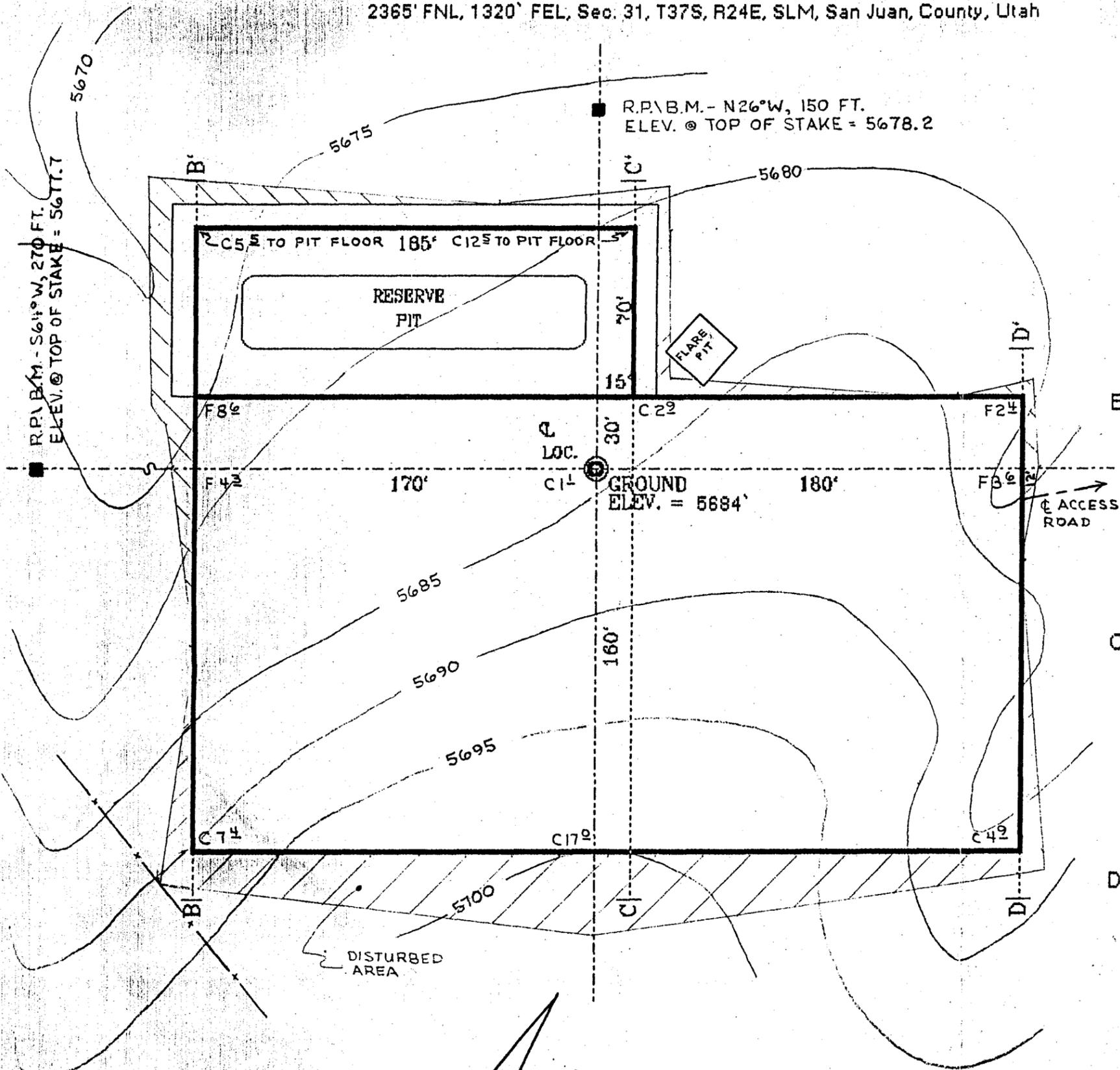
- DRY HOLE
- PRODUCING OIL WELL



CONFIDENTIAL

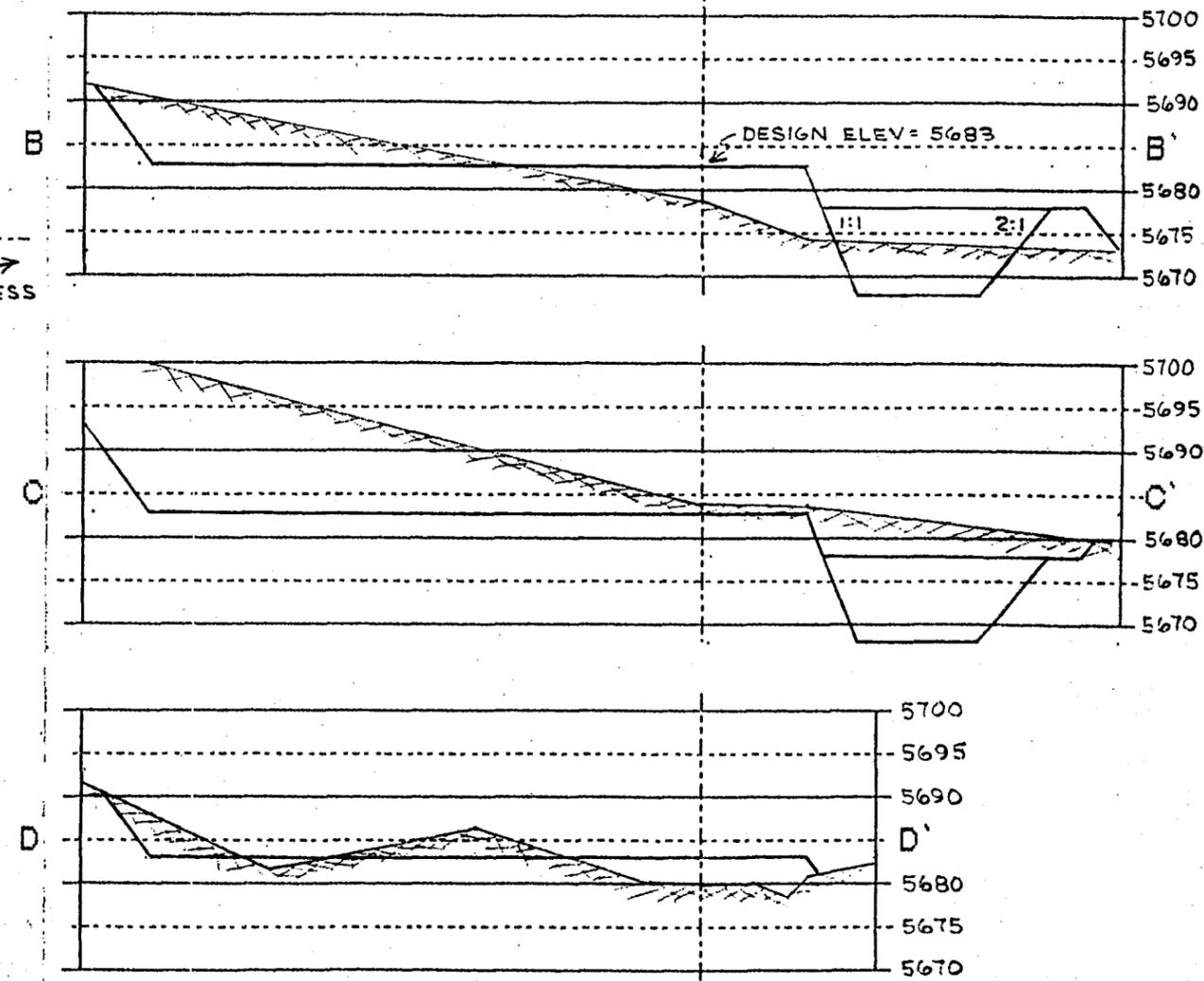
Exhibit 'C'

MARATHON OIL COMPANY McCracken Springs No. 4-31 Alternate
 2365' FNL, 1320' FEL, Sec. 31, T37S, R24E, SLM, San Juan, County, Utah



CROSS SECTIONS
 HORIZONTAL SCALE: 1" = 50'
 VERTICAL SCALE: 1" = 20'

CONFIDENTIAL



VOLUMES

TOTAL CUT	= 16,045 y ³
TOTAL FILL	= 909 y ³
TOP SOIL	= 891 y ³
WASTE	= 14,245 y ³
RESERVE PIT CAPACITY	= 14,693 BARRELS

MARATHON OIL CO.
 CODY, WYOMING

WELL SITE PLAN
 McCracken No. 4-31 Alternate
 Sec 31, T 37 S, R 24 E, SLM
 San Juan County, Utah

Clark-Reed Dec 21, 1987
 Durango, Colorado File 87007

Exhibit 'D'

McCRACKEN SPRINGS No. 4-31 Alternate

Access Road

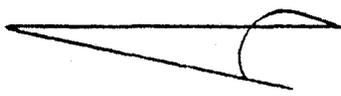
ON No 1-31 PAD

N 48° E, 40 FT

N 55° E
91 FT.

25-12 FT

McCRACKEN
SPRINGS
No. 4-31 ALT.



SCALE: 1" = 100'

CONFIDENTIAL

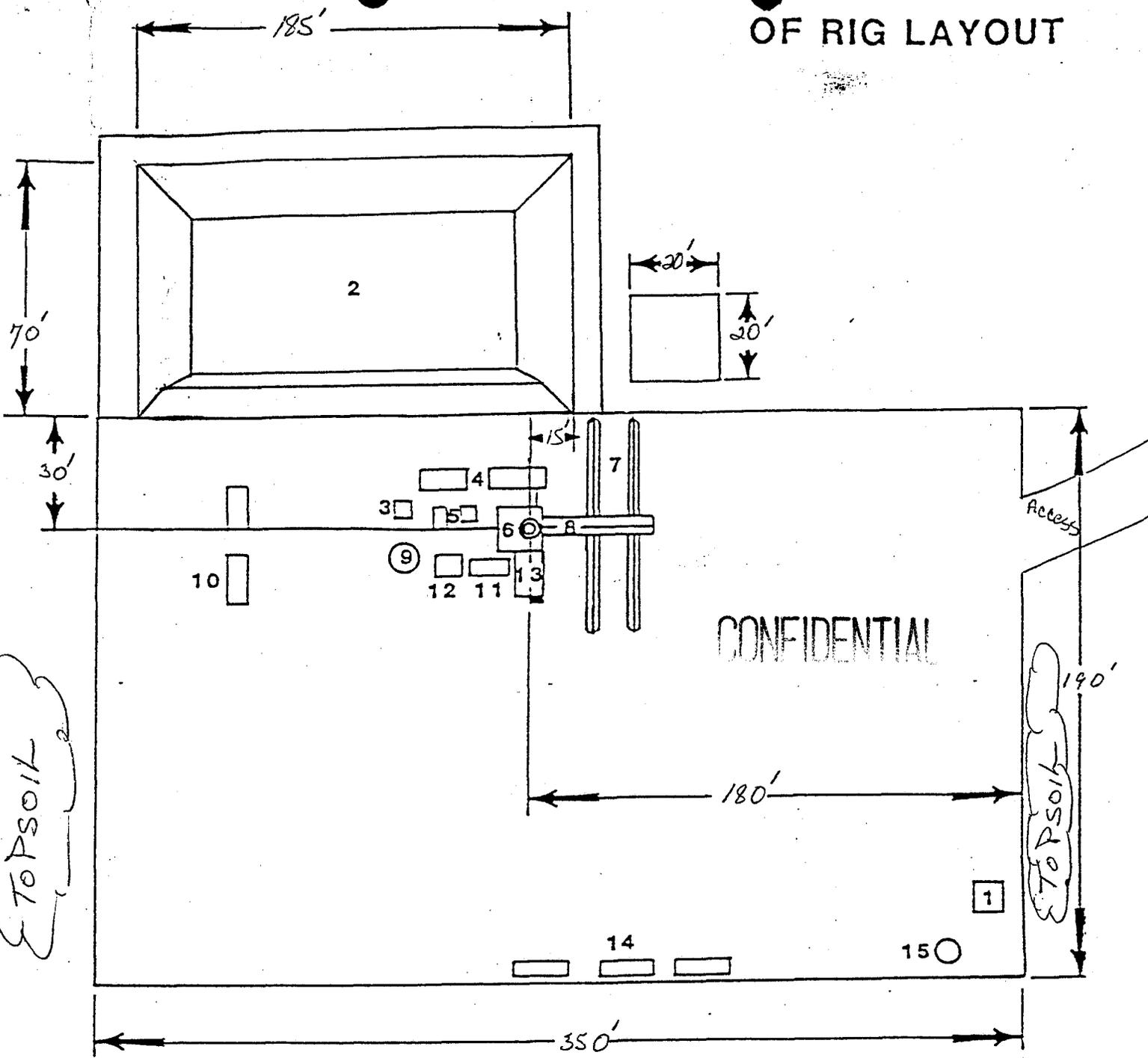
MARATHON OIL COMPANY
CODY, WYOMING

McCRACKEN SPGS
No. 4-31 Alternate
Access Road

Clark-Reed #87007

Exhibit 'E'

PROPOSED SCHEMATIC OF RIG LAYOUT



NORTH

- | | |
|-------------------------|--------------------|
| 1 TRASH CAGE | 9 WIRE ROPE REEL |
| 2 RESERVE PIT | 10 FUEL TANK |
| 3 MUD HOUSE | 11 WATER TANK |
| 4 CIRCULATING MUD TANKS | 12 GENERATOR |
| 5 PUMP | 13 DOG HOUSE |
| 6 DRILLING RIG | 14 TRAILER HOUSE |
| 7 PIPE RACKS | 15 CHEMICAL TOILET |
| 8 CATWALK | |



Marathon Oil Company
 P.O. Box 2690
 Cody, Wyoming 82414
 Telephone 307/587-4961

Exhibit 'J'



P.O. Box 2690
Cody, Wyoming 82414
Telephone 307/587-4961

RECEIVED
MAR 14 1988

March 11, 1988

DIVISION OF
OIL, GAS & MINING

CONFIDENTIAL

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

RE: Exception to Location for the Proposed Well McCracken Spring #4-31, Bottom Hole Located SW $\frac{1}{4}$ NE $\frac{1}{4}$ 2130' FNL, 1500' FEL of Section 31, T37S, R24E, Surface Located 2365' FNL, 1320' FEL of Section 31, T37S, R24E, San Juan County, Utah

Gentlemen:

Marathon Oil Company requests administrative approval from the Division for an exception to the locating and siting requirements of R615-3-2 in association with the above referenced well.

The well, McCracken Spring #4-31 is proposed to be drilled with the bottom hole being in the SW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 31, T37S, R24E. Presently an existing well, McCracken Spring #1-31, which is owned and operated by Marathon Oil Company is located in the adjacent quarter quarter section, the SE $\frac{1}{4}$ NE $\frac{1}{4}$. The proposed bottom hole location is approximately 561' from the existing #1-31 well.

Marathon Oil Company is the owner and operator of all lands within a 460' radius of the proposed McCracken Spring #4-31 well. Because of this, administrative approval is being requested as set forth in R615-3-3. Please refer to Attachment '1' for further clarification.

Your approval of this request would be greatly appreciated.

Sincerely,

MARATHON OIL COMPANY

A handwritten signature in cursive script that reads 'R P Meabon'.

R. P. Meabon
Regulatory Coordinator
Rocky Mountain Region

RPM/FMK/rrm

Attachment

R24E

Farmed Out Lease U-51846

30

CONFIDENTIAL

T37S

Marathon Retained Lease U-51846

Proposed McCracken Spring #4-31

Bottomhole

Surface

McCracken Spring #1-31

31

McCracken Spring #4-31

Surface: 2365' FNL & 1320' FEL Bottomhole: 2130' FNL & 1500' FEL

CONFIDENTIAL

032501

OPERATOR Marathon Oil Co. DATE 3-16-88

WELL NAME McCracken Spring 4-31

SEC 5/2 NE 31 T 37S R 24E COUNTY San Juan
Surf.
BML SW/NE

43-037-31393
API NUMBER

Fed.
TYPE OF LEASE

CHECK OFF:

PLAT

BOND

NEAREST WELL

LEASE

FIELD

POTASH OR OIL SHALE

PROCESSING COMMENTS:

Water permit 09-154 (T62938)
Exception requested

CONFIDENTIAL
PERIOD
EXPIRED
ON 3-13-90

APPROVAL LETTER:

SPACING: R615-2-3 _____ UNIT

R615-3-2

_____ CAUSE NO. & DATE

R615-3-3

STIPULATIONS:



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

March 18, 1988

Marathon Oil Company
P. O. Box 2690
Cody, Wyoming 82414

Gentlemen:

Re: McCracken Spring 4-31 - (Surf.) S/2 NE Sec. 31, T. 37S, R. 24E
2365' FNL, 1320' FEL - (BHL) SW NE - 2130' FNL, 1500' 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.

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 Jim Thompson, Lead Inspector, (Home) 298-9318.
5. Compliance with the requirements of Rule R615-3-22, Gas Flaring or Venting, Oil and Gas Conservation General Rules.

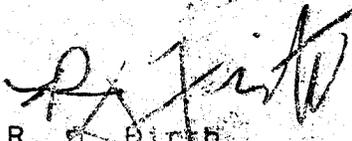
Page 2

Marathon Oil Company
McCracken Spring 4-31
March 18, 1988

6. Prior to commencement of 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 43-037-31393.

Sincerely,



R. G. Birtch
Associate Director, Oil & Gas

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

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

2. NAME OF OPERATOR
 Marathon Oil Company

3. ADDRESS OF OPERATOR
 P. O. Box 2690, Cody, Wyoming 82414

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
 At surface: 2365' FNL & 1320' FEL
 At proposed prod. zone: 2130' FNL & 1500' FEL

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 Approximately 11 miles Northwest of Hatch Trading Post

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any)
 510'

16. NO. OF ACRES IN LEASE
 Marathon Retained 80

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.
 587'

19. PROPOSED DEPTH
 6400'

20. ROTARY OR CABLE TOOLS
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 5684' Ungraded Ground Level

22. APPROX. DATE WORK WILL START*
 ASAP

RECEIVED
APR 14 1988
OIL GAS & MINING
CONFIDENTIAL

5. LEASE DESIGNATION AND SERIAL NO.
 U-51846 DM

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
 McCracken Spring

9. WELL NO.
 4-31

10. FIELD AND POOL, OR WILDCAT
 McCracken Spring

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 Sec. 31, T37S, R24E

12. COUNTY OR PARISH 13. STATE
 San Juan Utah

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
--------------	----------------	-----------------	---------------	--------------------

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 RP Meador TITLE Regulatory Coordinator DATE March 11, 1988

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____
/s/ Kenneth V. Rhea
 APPROVED BY: _____ TITLE ASSISTANT DIRECTOR DATE APR 11 1988
 CONDITIONS OF APPROVAL, IF ANY: _____

FLARING OR VENTING OF GAS IS SUBJECT TO 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.

DOGm

R24E

Farmed Out Lease U-51846

30

CONFIDENTIAL

T37S

Marathon Retained Lease U-51846

Proposed McCracken Spring #4-31

Bottomhole

Surface

McCracken Spring #1-31

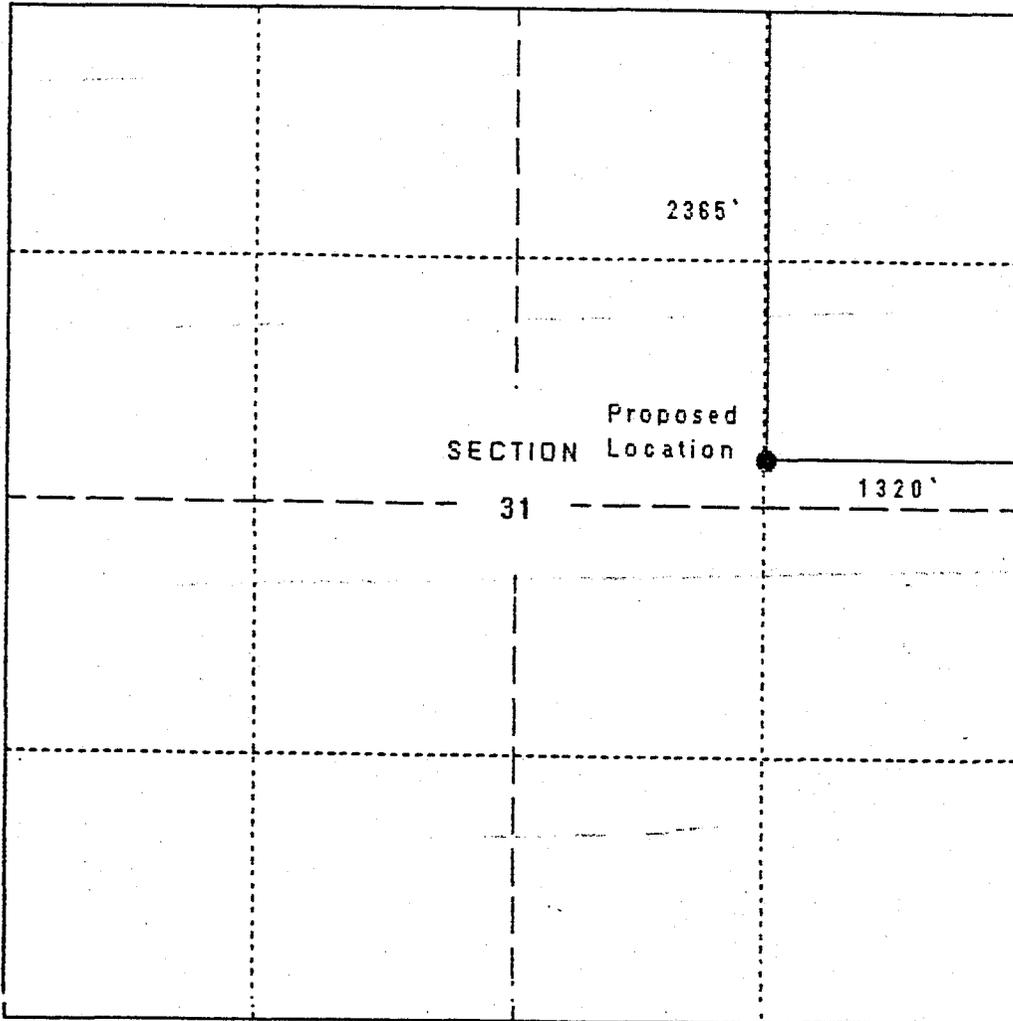
31

McCracken Spring #4-31

Surface: 2365' FNL & 1320' FEL Bottomhole: 2130' FNL & 1500' FEL

WELL LOCATION PLAT

CONFIDENTIAL



Scale 1"=1000'

WELL LOCATION: MARATHON McCracken Springs No. 4-31 Alternate

Located 2365 feet South from the North line and 1320 feet West from the East line of Section 31, Township 37 South, Range 24 East, Salt Lake Meridian.

Ground elevation determined at 5684 feet based on Well No. 1-31.

This is to certify that this plat represents a survey made by me or under my supervision and that it is correct to the best of my belief and knowledge.

Louis Jobe

Louis Jobe
Registered Land Surveyor

Exhibit 'B'



MARATHON OIL COMPANY
CODY, WYOMING

WELL LOCATION PLAT
McCracken Springs No 4-31 Alternate
Sec. 31, T37S, R24E, S.L.M.
San Juan County, Utah

CLARK-REED & ASSOC. Dec 21, 1987
Durango, Colorado File No 87007

Marathon Oil Company
Well No. McCracken Spring 4-31
Sec. 31, T. 37 S., R. 24 E.
San Juan County, Utah
Lease U-51846

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.

Marathon Oil Company 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. THIRTEEN POINT 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;

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) 259-6239

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.

WATER PERMIT
09-1541 (T62938)

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

API NO. 43-037-31393

NAME OF COMPANY: MARATHON

WELL NAME: McCRACKEN SPRINGS #4-31
Surf. S2NE

SECTION 31 TOWNSHIP 37S RANGE 24E COUNTY SAN JUAN
BHL SWNE

DRILLING CONTRACTOR COLEMAN

RIG # 4

SPUDDED: DATE 4/29/88

TIME 10:15 p.m.

How Rotary

CONFIDENTIAL

DRILLING WILL COMMENCE _____

REPORTED BY FRANK KUEGH

TELEPHONE # 307-587-4961

DATE 5/2/88 SIGNED TAS

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE
(Other instructions on reverse side)

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
Marathon Oil Company

3. ADDRESS OF OPERATOR
P. O. Box 2690, Cody, Wyoming 82414

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)
At surface
2365' FNL&1320' FEL

5. LEASE DESIGNATION AND SERIAL NO.
U-51846

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
McCracken Spring

9. WELL NO.
4-31

10. FIELD AND POOL, OR WILDCAT
McCracken Spring

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 31, T37S, R24E

12. COUNTY OR PARISH
San Juan

13. STATE
Utah

14. PERMIT NO.
43-037-31393

15. ELEVATIONS (Show whether DF, RT, CR, etc.)
5684' Ungraded GL

MAY 5 1988

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

NOTICE OF INTENTION TO:

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

SUBSEQUENT REPORT OF:

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

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

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

The above referenced well was spudded on April 29, 1988 At 10:15 PM by Coleman Rig #4. Surface casing will be set at approximately 2250' and BOP tests will be conducted on May 2, 1988. This was reported to Mr. Dale Manchester, BLM Moab by Frank Krugh, Marathon Oil Company, on May 1, 1988.

BLM- Orig. +3, SUDOGM-2, WRF, FMK, DRILLING, Title & Contracts(Houston)

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

SIGNED RPMelan TITLE Regulatory Coordinator DATE May 2, 1988

(This space for Federal or State office use)

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

*See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPPLICATE*
(Other instructions re-
verse side)

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
Marathon Oil Company

3. ADDRESS OF OPERATOR
P. O. Box 2690, Cody, Wyoming 82414

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

2365' FNL&1320' FEL

14. PERMIT NO.
43-037-31393

15. ELEVATIONS (Show whether DF, RT, CR, etc.)
5684' Ungraded 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) <u>Spud</u>	<input checked="" type="checkbox"/>

(NOTE: Report results of multiple completion or 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 above referenced well was spudded on April 29, 1988 At 10:15 PM by Coleman Rig #4. Surface casing will be set at approximately 2250' and BOP tests will be conducted on May 2, 1988. This was reported to Mr. Dale Manchester, BLM Moab by Frank Krugh, Marathon Oil Company, on May 1, 1988.

BLM- Orig. +3, SUDOGM-2, WRF, FMK, DRILLING, Title & Contracts(Houston)

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

SIGNED R P Mealen TITLE Regulatory Coordinator DATE May 2, 1988

(This space for Federal or State office use)

APPROVED BY ACCEPTED TITLE MANAGER OF FUND SERVICES DATE MAY 12 1988

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side



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

June 13, 1988

Marathon Oil Company
P. O. Box 2690
Cody, Wyoming 82414

Gentlemen:

Re: Request for Completed Entity Action Form

This is written to remind you that all well operators are responsible for sending an Entity Action Form to the Division of Oil, Gas and Mining within five working days of spudding a new well. This office was notified that your company spudded the McCracken Spring 4-31 API Number 43-037-31393 on April 29, 1988. At this time, we have not received an Entity Action Form for this well.

Please review the instructions on the back of the enclosed form. Make sure you choose the proper Action Code to show whether the well will be a single well with its own sales facilities (Code A), a well being added to an existing group of wells having the same tank battery and common division of royalty interest (Code B - show existing Entity Number to which well should be added), or a well being drilled in the participating area of a properly designated unit (Code B). Complete the form and return it to us by June 24.

Your attention to this matter is appreciated. If we can be of assistance to you, please feel free to call.

Sincerely,

Don Staley
Administrative Supervisor

Enclosure
cc: D.R. Nielson
R.J. Firth
0682S

RECEIVED
JUN 24 1988

LCR

ENTITY ACTION FORM

OPERATOR Marathon Oil Company
ADDRESS P.O. Box 2690
Cody, Wyoming 82414

OPERATOR CODE N-3490
PHONE NO. (307) 587-4961

DIVISION OF
OIL, GAS & MINING

OPERATORS MUST COMPLETE FORM UPON SPUDDING NEW WELL OR WHEN CHANGE IN OPERATIONS OR INTERESTS NECESSITATES CHANGE IN EXISTING ENTITY NUMBER ASSIGNMENT.

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION				SPUD DATE	EFFECTIVE DATE	
					SC	TP	RG	COUNTY			
B	99999 8431	8431	043-037-31393	McCraken Spring 4-31	sw/ne	31	37	24	San Juan	04/29/88	
COMMENTS: Current entity 99999 Federal Lease Proposed Zone - Akah (Marathon has another POW in sec. producing from ISMY formation, assign the same entity number, however letter in suspense to verify zone from well completion report 6/27/88. LCR) not in a Unit Field - Undesignated											
A	99999	10885	043-037-31417	Lighting Draw 1	nw/se	35	30	23	San Juan	05/28/88	
COMMENTS: Current entity - 99999 Federal Lease Proposed zone - DSCR (only well in sec. 35, assign new entity number 10885, 6/27/88. LCR) Not in a Unit Field - Wildcat											
COMMENTS:											
COMMENTS:											
COMMENTS:											
COMMENTS:											

CONFIDENTIAL

- ACTION CODES:
- A - ESTABLISH NEW ENTITY FOR NEW WELL (SINGLE WELL ONLY)
 - B - ADD NEW WELL TO EXISTING ENTITY (GROUP OR UNIT WELL)
 - C - RE-ASSIGN WELL FROM ONE EXISTING ENTITY TO ANOTHER EXISTING ENTITY
 - D - RE-ASSIGN WELL FROM ONE EXISTING ENTITY TO A NEW ENTITY
 - E - OTHER (EXPLAIN IN COMMENTS SECTION)
- (SEE INSTRUCTIONS ON BACK OF FORM)

[Signature]
SIGNATURE

Prod. Accounting Supr. June 22, 88
TITLE DATE

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE
(Other instructions on reverse side)

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

RECEIVED
AUG 8 1988

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. U-51846
2. NAME OF OPERATOR Marathon Oil Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR P. O. Box 2690, Cody, Wyoming 82414		7. UNIT AGREEMENT NAME ---
4. LOCATION OF WELL (Report location clearly and in accordance with any OIL, GAS & MINING See also space 17 below.) At surface 2365' FNL & 1320' FEL		8. FARM OR LEASE NAME McCracken Spring
14. PERMIT NO. 43-037-31393		9. WELL NO. 4-31
15. ELEVATIONS (SHOW WHETHER OF FT. OR FIC.) 5684' Ungraded GL		10. FIELD AND POOL, OR WILDCAT McCracken Spring
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 31, T37S, R24E
		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>First Production</u> <input checked="" type="checkbox"/>	

(NOTE: Report results of multiple completion or 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.)

CONFIDENTIAL

The above referenced well first produced on August 3, 1988 at 12:00 noon. This was reported to Mr. Lynn Jackson BLM, Moab on August 3, 1988

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

BLM-Orig & 3--cc: SUDOGM-2, WRF, FMK, ECS, TKS, Title & Contract (Houston)

SIGNED R P Meaban TITLE Regulatory Coordinator DATE August 4, 1988

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE*
(Other instructions
verse blue)

Bucket: Bureau No. 1000-0125
Expires August 31, 1984

SUNDRY NOTICES AND REPORTS ON WELLS

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

RECEIVED
AUG 22 1988

1. OIL WELL CAR WELL OTHER

2. NAME OF OPERATOR
Marathon Oil Company

3. ADDRESS OF OPERATOR
P. O. Box 2690, Cody, Wyoming 82414

4. LOCATION OF WELL (Report location clearly and in accordance with BLM State requirements.
See also space 17 below.)
At surface
2365' FNL & 1320' FEL

5. LEASE DESIGNATION AND SERIAL NO.
U-51846

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
McCracken Spring

9. WELL NO.
4-31

10. FIELD AND POOL, OR WILDCAT
McCracken Spring

11. SEC. T., R., M., OR BLM, AND
SERVAT OR AREA
Sec. 31, T37S, R24E

12. COUNTY OR PARISH 13. STATE
San Juan Utah

14. PERMIT NO. 15. FORM NO. 16. ELEVATIONS (Show whether DF, FT, OR ETC.)
43-037-31393 5684' Ungraded 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) <u>First Production</u> <input checked="" type="checkbox"/>	

(Note: Report results of multiple completion or 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.)*

CONFIDENTIAL

The above referenced well first produced on August 3, 1988 at 12:00 noon. This was reported to Mr. Lynn Jackson BLM, Moab on August 3, 1988

RECEIVED
AUG 19 1988

DIVISION OF
OIL, GAS & MINING

BLM-Orig & 3--cc: SUDOGM-2, WRF, FMK, ECS, TKS, Title & Contract (Houston)

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

SIGNED R P Meaban TITLE Regulatory Coordinator DATE August 4, 1988

(This space for Federal or State office use)

APPROVED BY ACCEPTED TITLE MANAGER DATE AUG 10 1988

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE*

(See other instructions on reverse side)

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

Sub 06m 8

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

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

b. TYPE OF COMPLETION:
NEW WELL WORK OVER DEEP-EN PLUG BACK DIFF. REVR. Other _____

2. NAME OF OPERATOR
Marathon Oil Company

3. ADDRESS OF OPERATOR
P. O. Box 2690, Cody, Wyoming 82414

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)
At surface
2365' FNL & 1320' FEL
At top prod. interval reported below

RECEIVED
JAN 19 1989

DIVISION OF
OIL, GAS & MINING

5. LEASE DESIGNATION AND SERIAL NO.

U-51846

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

McCracken Springs

9. WELL NO.

4-31

10. FIELD AND POOL, OR WILDCAT

McCracken Spring

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

Sec. 31, T37S, R24E

12. COUNTY OR PARISH

San Juan

13. STATE

Utah

14. PERMIT NO.

DATE ISSUED

43-037-31393

15. DATE SPUDDED 4/49/88 16. DATE T.D. REACHED 5/19/88 17. DATE COMPL. (Ready to prod.) 12/13/88 18. ELEVATIONS (DP, RKB, RT, CR, ETC.)* 5696' KB 19. ELEV. CASINGHEAD 5683' GL

20. TOTAL DEPTH, MD & TVD 6387' KB 21. PLUG, BACK T.D., MD & TVD 6269' KB 22. IF MULTIPLE COMPL., HOW MANY? --- 23. INTERVALS DRILLED BY 0 24. ROTARY TOOLS 6387' 25. CABLE TOOLS N/A

24. PRODUCING INTERVAL(S). OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
Ismay 6084'-6066'

25. WAS DIRECTIONAL SURVEY MADE
Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN
GR/CCL/CBL/VDL, FDC/CNL/GR/CAL, DLL/MSFL/GR/CAL, FMS/GR/CAL C_g

27. WAS WELL CORED
No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9-5/8"	36#	2227'	12-1/4"	910 Sacks to surface	None
5-1/2"	17#	6387'	8-3/4"	1350 sacks to 2520'	None

29. LINER RECORD

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

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-7/8"	6151' KB	SN 6151' KB

31. PERFORATION RECORD (Interval, size and number)

6084'-6102'
6050'-6066' 4 SPF

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
6084'-6066'	Acidized w/3400 gals. 15% HCL
	Acid fraced w/12,000 gals. 28%
	HCL and 4000 gals. versagel

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)					
8/3/88	Pumping 2-1/2" x 1-1/2" x 20' RWBC	Producing					
DATE OF TEST	HOURS TESTED	CHOKER SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
12/13/88	24	N/A	→	34	22	4	647
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
65 psi	80	→	34	22	4	45	

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

Being sold

TEST WITNESSED BY

Field Foreman

35. LIST OF ATTACHMENTS

Drill Stem Test (Attachment '1'), Deviation Survey (Attachment '2')

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

SIGNED R P Meahan TITLE Regulatory Coordinator DATE 1/16/89

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

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

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Ismay	6084'	6066'	Oil & Gas
			BLM-Orig & 2--cc: SUDOGM-2, WRF, FMK, TKS, GBP, Title & Contract (Houston)

OIL AND GAS	
DEM	RJF
JTC	GLH
	SLS
1-TAS	
MICROFILM	
2-	FILE

38. GEOLOGIC MARKERS

NAME	MEAS. DEPTH	TOP	TRUE
		VERT. DEPTH	VERT. DEPTH
Skinarump	2996'		2700'
Moenkopi	3044'		2652'
Cutler	3088'		2608'
Honaker Trail	4916'		780'
Paradox	5860'		- 164'
Upper Ismay	6000'		- 304'
Hovenweep	6133'		- 437'
Lower Ismay	6171'		- 475'
Desert Creek	6251'		- 555'
Chimney Rock	6323'		- 627'

DATE: 5/6/64 KB

DRILL STEM TEST

DST #1

Ismay Formation

Top Packer 6070'

Bottom Packer 6110'

Pressures:

	<u>Upper Gauge</u>	<u>Middle Gauge</u>	<u>Lower Gauge</u>
IH	3152.2	3102	3247.9
IF	537	62.2	2549.7
ISI	1182.8	1211.6	2676.6
FF	67.1	94.6	
FSI	886.8	902.2	
FH	3152.2	3102	3226.7

Times: IF = 5 minutes, FF = 1 hour

Sample Chamber: 90 PSIG Surface, .067 Cu Ft. Gas, 2000 CC Mud,
Total Liquid 2000 CC.

Attachment '1'

Deviation Survey

<u>Depth</u>	<u>Angle</u>	<u>Direction</u>	<u>Depth</u>	<u>Angle</u>	<u>Direction</u>
130'	1/4 ⁰		4545'	2-3/4 ⁰	N14W
347'	1/4 ⁰		4598'	2-1/2 ⁰	N13E
565'	3/4 ⁰		4624'	2-1/2 ⁰	N15E
749'	3/4 ⁰		4658'	2-1/2 ⁰	N11E
963'	1/4 ⁰		4688'	2-1/2 ⁰	N10E
1207'	1/4 ⁰		4718'	2-1/4 ⁰	N10E
1421'	1/4 ⁰		4734'	2.6 ⁰	N17E
1639'	3/4 ⁰		4771'	3.3 ⁰	N04E
1826'	1 ⁰		4803'	4.1 ⁰	N06W
1950'	1 ⁰		4866'	5.4 ⁰	N23W
2039'	1 ⁰		4958'	7.6 ⁰	N40W
2568	3/4 ⁰	N27W	5021'	9.8 ⁰	N46W
2963'	3/4 ⁰	N13E	5062'	10.5 ⁰	N46W
3462'	1 ⁰	N08E	5187'	9-3/4 ⁰	N46W
3798'	1-1/4 ⁰	N01W	5310'	8-1/4 ⁰	N44W
4053'	1-1/4 ⁰	N13W	5470'	7-1/2 ⁰	N39W
4152'	2.48 ⁰	N38W	5553'	6 ⁰	N33W
4279'	3.97 ⁰	N31W	5671'	6 ⁰	N32W
4310'	4.33 ⁰	N35W	5766'	6-1/2 ⁰	N32W
4374'	4.37 ⁰	N41W	5859'	6-1/2 ⁰	N30W
4405'	5.02 ⁰	N35W	5981'	7 ⁰	N31W
4434'	5.15 ⁰	N39W	6011'	6-1/4 ⁰	N33W
4504'	3 ⁰	N12W	6359'	6-1/4 ⁰	N25W

Attachment '2'

Division of Oil, Gas and Mining
PHONE CONVERSATION DOCUMENTATION FORM

Route original/copy to:

Well File McCracken Spring
4-31
(Location) Sec 31 Twp 37S Rng 24E
(API No.) 43-037-31393

Suspense
(Return Date) 9/24/89
(To - Initials) AWS

Other

1. Date of Phone Call: 9/6/89 Time: 11 AM

2. DOGM Employee (name) Orlane S. (Initiated Call
Talked to:

Name Randy Meaton (Initiated Call - Phone No. (307) 587-4961
of (Company/Organization) Meathon

3. Topic of Conversation: Directional Drill Survey

4. Highlights of Conversation: He will send survey in

Confidential

WILSON DOWNHOLE DIRECTIONAL DRILLING
5780 W. YELLOWSTONE HIGHWAY
CASPER, WYOMING 82604

24 HOUR #(307) 234-4800

DIRECTIONAL DRILLING REPORT

RECEIVED

SEP 21 1989

DIVISION OF
OIL, GAS & MINING

DATE 5-25-88

COMPANY MARATHON OIL COMPANY

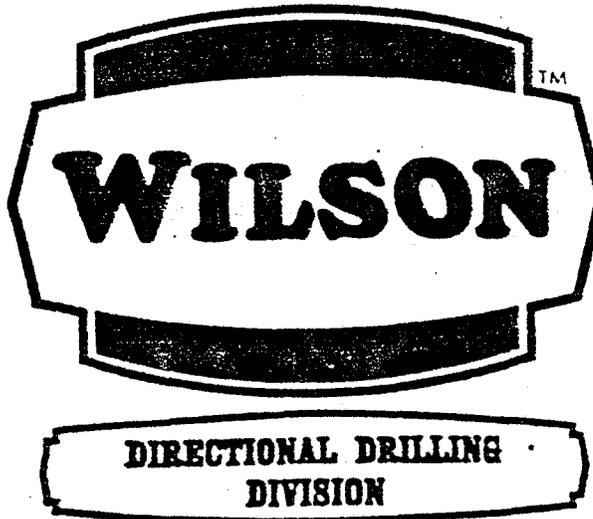
WELL McCRACKEN SPRINGS WELL #4-31

LOCATION SAN JUAN COUNTY, UTAH

JOB #12145-D8. API # 43-037-31393

37S, Q4E, Sec. 31

MAGNETIC DECLINATION _____



OIL AND GAS	
DRN	RJF
JRB	GLH
DTS	SLS
1-AWS ✓	
2-TAS	
3- MICROFILM	
4- FILE	

MARATHON OIL COMPANY
 McCRACKEN SPRINGS WELL #4-31
 SAN JUAN COUNTY, UTAH
 MAC HANSEN/FOREMAN

WILSON DOWNHOLE DIRECTIONAL DRILLING
 5-25-88 JOB #12145-D8

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	
500	0 0	500.00	0.00	N 0 E	0.00	N 0.00 W	0.00	N 90	0 0 W	0.000
558	0 15	558.00	0.08	N 87 W	0.01	N 0.13 W	0.13	N 87	0 0 W	0.523
1105	1 0	1104.96	4.36	N 77 W	1.15	N 5.97 W	6.08	N 79	9 41 W	0.139
1756	1 0	1755.86	12.09	N 87 W	2.72	N 17.18 W	17.40	N 81	0 30 W	0.027
2195	1 45	2194.74	20.26	N 65 W	5.76	N 27.08 W	27.69	N 78	0 30 W	0.208
2568	0 45	2567.65	27.61	N 27 W	10.34	N 33.35 W	34.92	N 72	46 60 W	0.7
2963	0 45	2962.62	31.90	N 13 E	15.16	N 33.95 W	37.18	N 65	56 13 W	0.1
3462	1 0	3461.56	37.26	N 8 E	22.66	N 32.60 W	39.70	N 55	12 31 W	0.052
3798	1 15	3797.49	42.44	N 1 W	29.22	N 32.26 W	43.53	N 47	49 44 W	0.091
4053	1 15	4052.43	47.33	N 13 W	34.71	N 32.94 W	47.85	N 43	29 36 W	0.102
4152	2 30	4151.38	50.48	N 38 W	37.47	N 34.51 W	50.94	N 42	38 39 W	1.505
4185	2 45	4184.34	51.99	N 41 W	38.63	N 35.47 W	52.44	N 42	33 21 W	0.864
4279	4 0	4278.18	57.50	N 31 W	43.14	N 38.64 W	57.91	N 41	50 43 W	1.470
4310	4 20	4309.10	59.75	N 35 W	45.03	N 39.87 W	60.14	N 41	31 6 W	1.426
4376	4 21	4374.91	64.73	N 41 W	48.96	N 42.94 W	65.12	N 41	14 58 W	0.688

MEAS. DEPTH	DRIFT ANGLE D M	TRUE	VERTICAL SECTION	DRIFT DIREC DEG	PAGE	TOTAL COORDINATES	C L O S U R E S			DOG LEGS SEVERITY DEG/100FT
		VERTICAL DEPTH			2		DISTANCE	ANGLE	D M S	
4504	3 0	4502.65	72.65	N 12 W		55.90 N 46.82 W	72.92 N	39 56 47 W	1.782	
4545	2 45	4543.60	74.55	N 14 W		57.91 N 47.28 W	74.76 N	39 13 52 W	0.657	
4598	2 15	4596.55	76.43	N 13 E		60.15 N 47.36 W	76.56 N	38 12 36 W	2.395	
4629	2 30	4627.53	77.27	N 15 E		61.40 N 47.04 W	77.35 N	37 27 27 W	0.850	
4658	2 30	4656.50	78.12	N 11 E		62.63 N 46.76 W	78.16 N	36 44 34 W	0.602	
4688	2 30	4686.47	79.04	N 10 E		63.92 N 46.52 W	79.05 N	36 2 47 W	0.145	
4718	2 15	4716.44	79.91	N 10 E		65.14 N 46.30 W	79.92 N	35 24 17 W	0.877	
4734	2 36	4732.43	80.36	N 17 E		65.80 N 46.14 W	80.37 N	35 2 25 W	2.8	
4771	3 18	4769.38	81.70	N 4 E		67.66 N 45.82 W	81.72 N	34 6 21 W	2.61	
4803	4 6	4801.31	83.42	N 6 W		69.72 N 45.88 W	83.46 N	33 20 44 W	3.210	
4866	5 24	4864.10	88.29	N 23 W		74.69 N 47.27 W	88.39 N	32 19 47 W	3.036	
4928	6 54	4925.74	94.87	N 35 W		80.43 N 50.55 W	94.99 N	32 8 57 W	3.184	
4958	7 36	4955.50	98.64	N 40 W		83.42 N 52.86 W	98.76 N	32 21 30 W	3.141	
5021	9 48	5017.78	108.06	N 46 W		90.34 N 59.39 W	108.11 N	33 19 20 W	3.777	
5062	10 30	5058.13	115.15	N 46 W		95.36 N 64.59 W	115.17 N	34 6 40 W	1.707	
5187	9 45	5181.19	136.76	N 45 W		110.76 N 80.27 W	136.78 N	35 55 55 W	0.616	
5310	8 15	5302.67	155.74	N 44 W		124.47 N 93.76 W	155.83 N	36 59 28 W	1.226	
5430	7 30	5421.54	172.05	N 39 W		136.75 N 104.67 W	172.21 N	37 25 55 W	0.846	
5553	6 0	5543.68	186.49	N 33 W		148.38 N 113.23 W	186.64 N	37 20 49 W	1.347	
5671	6 0	5661.04	198.81	N 32 W		158.78 N 119.85 W	198.94 N	37 2 48 W	0.089	
5766	6 30	5755.47	209.14	N 32 W		167.55 N 125.34 W	209.24 N	36 47 51 W	0.7	
5859	6 30	5847.87	219.64	N 30 W		176.57 N 130.76 W	219.72 N	36 31 13 W	0.2	
5981	7 0	5969.03	233.93	N 31 W		188.93 N 138.04 W	233.98 N	36 9 11 W	0.421	
6011	6 15	5998.83	237.39	N 32 W		191.88 N 139.85 W	237.43 N	36 5 6 W	2.529	
6360	6 15	6345.75	275.06	N 25 W		225.21 N 157.94 W	275.07 N	35 2 32 W	0.218	

BOTTOM HOLE CLOSURE 275.07 FEET AT N 35 2 32 W

We certify that this is a true and correct report of our survey and that it affords a true and correct representation of our findings as to the nature and conditions of the well at the time the survey was made.
 WILSON DOWNHOLE DIRECTIONAL DRILLING, INC.

Don Walker

**DIRECTIONAL SURVEY RECORD
WORKSHEET**

Operator: Maathon Well Name: McCracken Springs 431 Page 3 of 3

Contractor: _____ Rig Number: _____

Information for Surveys-

Date Run: _____ Job Number: _____

Surveyor: _____ Proposed Well Direction: _____

Calculation Method: _____

Meas Depth ft	Inclination Drift deg	Bore Hole Bearing deg	Dog leg Severity deg/100'	TVD ft	North/South Departure ft	East/West Departure ft	Closure Direction deg	Closure Distance ft	Vertical Section ft	Station to Trgt Plane ft
<u>5310</u>	<u>8 1/4</u>	<u>N44W</u>	<u>1.25</u>	<u>5302.85</u>	<u>N121.62</u>	<u>W66.15</u>	<u>N28.5W</u>	<u>138.44</u>	_____	_____
<u>5470</u>	<u>7 1/2</u>	<u>N39W</u>	<u>0.63</u>	<u>5461.34</u>	<u>N138.03</u>	<u>W80.67</u>	<u>N30.3W</u>	<u>159.88</u>	_____	_____
<u>5553</u>	<u>6</u>	<u>N33W</u>	<u>1.99</u>	<u>5543.77</u>	<u>N145.92</u>	<u>W86.41</u>	<u>N30.6W</u>	<u>169.50</u>	_____	_____
<u>5671</u>	<u>6</u>	<u>N32W</u>	<u>0.09</u>	<u>5661.12</u>	<u>N156.32</u>	<u>W93.03</u>	<u>N30.8W</u>	<u>181.91</u>	_____	_____
<u>5766</u>	<u>6 1/2</u>	<u>N32W</u>	<u>0.53</u>	<u>5755.56</u>	<u>N165.09</u>	<u>W98.51</u>	<u>N30.8W</u>	<u>192.25</u>	_____	_____
<u>5859</u>	<u>6 1/2</u>	<u>N30W</u>	<u>0.24</u>	<u>5847.96</u>	<u>N174.12</u>	<u>W103.94</u>	<u>N30.8W</u>	<u>202.78</u>	_____	_____
<u>5981</u>	<u>7</u>	<u>N31W</u>	<u>0.42</u>	<u>5969.11</u>	<u>N186.47</u>	<u>W111.21</u>	<u>N30.8W</u>	<u>217.12</u>	_____	_____
<u>6011</u>	<u>6 1/4</u>	<u>N33W</u>	<u>2.62</u>	<u>5998.91</u>	<u>N189.41</u>	<u>W113.05</u>	<u>N30.8W</u>	<u>220.58</u>	_____	_____
<u>6359</u>	<u>6 1/4</u>	<u>N25W</u>	<u>0.25</u>	<u>6344.84</u>	<u>N222.54</u>	<u>W131.42</u>	<u>N30.6W</u>	<u>258.45</u>	_____	_____

inaccurate due to no directional surveys run before 2568'. Can add ±19.5' to this number. This would be the total displacement from surface loc.

**DIRECTIONAL SURVEY RECORD
WORKSHEET**

Operator: _____ Well Name: _____ Page 2 of 3

Contractor: _____ Rig Number: _____

Information for Surveys-

Date Run: _____ Job Number: _____

Surveyor: _____ Proposed Well Direction: _____

Calculation Method: _____

Meas Depth ft	Inclination Drift deg	Bore Hole Bearing deg	Dog leg Severity deg/100'	TVD ft	North/South Departure ft	East/West Departure ft	Closure Direction deg	Closure Distance ft	Vertical Section ft	Station to Trgt Plan ft
4598	2 1/2	N13E	2.36	4596.75	N57.23	W19.86	N19.1W	60.58		
4624	2 1/2	N15E	0.34	4622.73	N58.33	W19.59	N18.6W	61.53		
4658	2 1/2	N11E	0.51	4656.69	N59.78	W19.25	N17.9W	62.80		
4688	2 1/2	N10E	0.15	4686.66	N61.07	W19.01	N17.3W	63.96		
4718	2 1/4	N10E	0.83	4716.63	N62.29	W18.79	N16.8W	65.07		
4734	2.6	N17E	2.86	4732.62	N62.95	W18.64	N16.5W	65.65		
4771	3.3	N04E	2.61	4769.57	N64.82	W18.29	N15.8W	67.35		
4803	4.1	N06W	3.20	4801.50	N66.88	W18.33	N15.5W	69.35		
4866	5.4	N23W	3.02	4864.29	N71.91	W19.63	N15.3W	74.54		
4958	7.6	N40W	3.15	4955.69	N80.76	W25.05	N17.2W	84.56		
5021	9.8	N46W	3.77	5017.96	N87.73	W31.54	N19.8W	93.23		
5062	10.5	N46W	1.71	5058.32	N92.75	W36.74	N21.6W	99.76		
5187	9.75	N46W	0.60	5181.37	N108.01	W52.55	N25.9W	120.12		

**DIRECTIONAL SURVEY RECORD
WORKSHEET**

Operator: _____ Well Name: _____ Page 1 of 3

Contractor: _____ Rig Number: _____

Information for Surveys-

Date Run: _____ Job Number: _____

Surveyor: _____ Proposed Well Direction: _____

Calculation Method: _____

Meas Depth ft	Inclination Drift deg	Bore Hole Bearing deg	Dog leg Severity deg/100'	TVD ft	North/South Departure ft	East/West Departure ft	Closure Direction deg	Closure Distance ft	Vertical Section ft	Station to Trgt Plan ft
<u>2568</u>	<u>3/4</u>	<u>N27W</u>			<u>N5.13</u>	<u>W5.00</u>				
<u>2963</u>	<u>3/4</u>	<u>N18E</u>	<u>0.13</u>	<u>2962.97</u>	<u>N10.26</u>	<u>W5.63</u>	<u>N28.7W</u>	<u>11.71</u>		
<u>3462</u>	<u>1</u>	<u>N08E</u>	<u>.05</u>	<u>3461.91</u>	<u>N17.75</u>	<u>W4.24</u>	<u>N13.4W</u>	<u>18.25</u>		
<u>3798</u>	<u>1 1/4</u>	<u>N01W</u>	<u>.09</u>	<u>3797.84</u>	<u>N24.33</u>	<u>W3.84</u>	<u>N9.0W</u>	<u>24.63</u>		
<u>4053</u>	<u>1 1/4</u>	<u>N13W</u>	<u>0.10</u>	<u>4052.78</u>	<u>N29.85</u>	<u>W4.52</u>	<u>N8.6W</u>	<u>30.19</u>		
<u>4152</u>	<u>2.48</u>	<u>N38W</u>	<u>1.46</u>	<u>4151.73</u>	<u>N32.74</u>	<u>W5.89</u>	<u>N10.2W</u>	<u>33.26</u>		
<u>4279</u>	<u>3.97</u>	<u>N31W</u>	<u>1.21</u>	<u>4278.52</u>	<u>N38.62</u>	<u>W9.94</u>	<u>N14.4W</u>	<u>39.88</u>		
<u>4310</u>	<u>4.33</u>	<u>N35W</u>	<u>1.49</u>	<u>4309.44</u>	<u>N40.5</u>	<u>W11.16</u>	<u>N15.4W</u>	<u>42.01</u>		
<u>4374</u>	<u>4.37</u>	<u>N41W</u>	<u>0.71</u>	<u>4373.26</u>	<u>N44.33</u>	<u>W14.15</u>	<u>W17.7W</u>	<u>46.53</u>		
<u>4405</u>	<u>5.02</u>	<u>N35W</u>	<u>2.63</u>	<u>4404.15</u>	<u>N46.33</u>	<u>W15.71</u>	<u>N18.7W</u>	<u>48.92</u>		
<u>4434</u>	<u>5.15</u>	<u>N39W</u>	<u>1.30</u>	<u>4433.04</u>	<u>N48.38</u>	<u>W17.25</u>	<u>N19.6W</u>	<u>51.36</u>		
<u>4504</u>	<u>3</u>	<u>N12W</u>	<u>4.04</u>	<u>4502.86</u>	<u>N52.83</u>	<u>W19.38</u>	<u>N20.1W</u>	<u>56.27</u>		
<u>4545</u>	<u>2 3/4</u>	<u>N14W</u>	<u>0.66</u>	<u>4543.81</u>	<u>N54.83</u>	<u>W19.84</u>	<u>N19.9W</u>	<u>58.31</u>		

WORKSHEET

Operator: _____ Well Name: _____

Contractor: _____ Rig Number: _____

Meas Depth ft	Inclination Drift Deg.	Total Departure Ft.
<u>130</u>	<u>1/4</u>	<u>0.59</u>
<u>347</u>	<u>1/4</u>	<u>1.51</u>
<u>565</u>	<u>3/4</u>	<u>4.37</u>
<u>749</u>	<u>3/4</u>	<u>6.78</u>
<u>963</u>	<u>1/4</u>	<u>7.71</u>
<u>1207</u>	<u>1/4</u>	<u>8.77</u>
<u>1421</u>	<u>1/4</u>	<u>9.71</u>
<u>1639</u>	<u>3/4</u>	<u>12.56</u>
<u>1826</u>	<u>1</u>	<u>15.83</u>
<u>1950</u>	<u>1</u>	<u>17.99</u>
<u>2039</u>	<u>1</u>	<u>19.54</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

8/28/89
JRM.

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

SUNDRY NOTICES AND REPORTS ON WELLS <small>(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.)</small>		5. LEASE DESIGNATION AND SERIAL NO. U-51846
1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR Robert L. Bayless, Producer LLC		7. UNIT AGREEMENT NAME
3. ADDRESS OF OPERATOR P.O. Box 168 Farmington, New Mexico 87499		8. FARM OR LEASE NAME McCracken Spring
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 2356' FNL & 1320" FEL		9. WELL NO. 4-31
14. API NUMBER 43-037-31393		10. FIELD AND POOL, OR WILDCAT McCracken Spring
15. ELEVATIONS (Show whether DF, RT, GR, etc.)		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 31, T37S, R24E
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) <input type="checkbox"/>	
(Other) <u>Operations</u>		(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.)*

Robert L. Bayless, Producer LLC has taken over operations of this well effective December 1, 1995.

RECEIVED
 DEC 27 1995

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

SIGNED <u>Tom R. McCarthy</u>	TITLE <u>Petroleum Engineer</u>	DATE <u>12/20/95</u>
(This space for Federal or State office use)		
APPROVED BY _____	TITLE _____	DATE _____
CONDITIONS OF APPROVAL, IF ANY:		

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

5. Lease Designation and Serial No.
U-51846

6. If Indian, Allottee or Tribe Name
NA

7. If Unit or CA, Agreement Designation
NA

8. Well Name and No.
1-31, 4-31

9. API Well No. 4303730956
4303731393

10. Field and Pool, or Exploratory Area
McCracken Spring

11. County or Parish, State
San Juan, Utah

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator
Robert L. Bayless, Producer LLC

3. Address and Telephone No.
PO Box 168, Farmington NM 87488 505-326-2659

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
#1-31: 2140' FNL and 940' FEL, SENE Sec. 31, T. 37 S., R. 24 E.
#4-31: 2365' FNL and 1320' FEL(Surf.)
2162' FNL and 1509' FEL(BHL), Sec. 31, T. 37 S., R. 24 E.

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Inten	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other <u>Change of Operator</u>
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

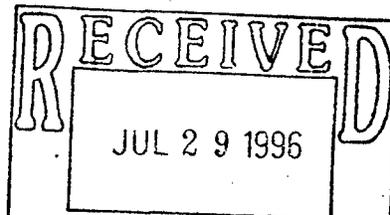
CHANGE OF OPERATOR

Robert L. Bayless, Producer LLC is taking over operations of the above captioned wells.

Robert L. Bayless, Producer LLC is responsible under the terms and conditions of the lease for operations conducted on the leased lands or portions thereof.

Bond coverage for the wells is provided by BLM Bond No. 71S40023024BCA NM0883

Effective Date: December 1, 1995



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

Signed [Signature]
(This space for Federal or State office use)

Title Petroleum Engineer
Assistant Field Manager,

DIV. OF OIL, GAS & MINING
Date 07/23/96

Approved by [Signature]
Conditions of approval, if any:

Title Resource Management

CONDITIONS OF APPROVAL ATTACHED

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

*See instruction on Reverse Side

Robert L. Bayless, Producer LLC
Well Nos. 1-31, 4-31
Sec. 31, T. 37 S., R. 24 E.
San Juan County, Utah
Lease U-51846

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.

Be advised that Robert L. Bayless, Producer LLC is considered to be the operator of the above wells and is responsible under the terms and conditions of the lease for the the operations conducted on the leased lands.

Bond coverage for this well is provided by NM0883 (Principal - Robert L. Bayless, Producer LLC) via surety consent as provided for in 43 CFR 3104.2.

This office will hold the aforementioned operator and bond liable until the provisions of 43 CFR 3106.7-2 continuing responsibility are met.

Division of Oil, Gas and Mining
OPERATOR CHANGE WORKSHEET

Routing:

1-LEC 7-FILM	✓
2-DTS 8-FILE	✓
3-VLD	✓
4-RJF	✓
5-LEC	✓
6-SJ	✓

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

- Change of Operator (well sold) Designation of Agent
 Designation of Operator Operator Name Change Only

The operator of the well(s) listed below has changed (EFFECTIVE DATE: 12-1-95)

TO (new operator)	<u>BAYLESS, ROBERT L PROD LLC</u>	FROM (former operator)	<u>MARATHON OIL COMPANY</u>
(address)	<u>PO BOX 168</u>	(address)	<u>PO BOX 552</u>
	<u>FARMINGTON NM 87499</u>		<u>MIDLAND TX 79702</u>
	<u>TOM MCCARTHY, PE</u>		
	phone <u>(505) 326-2659</u>		phone <u>(915) 687-8155</u>
	account no. <u>N7950 (2-14-96)</u>		account no. <u>N 3490</u>

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

Name:	<u>MCCRACKEN SPRING 1-31</u>	API:	<u>43-037-30956</u>	Entity:	<u>8431</u>	Sec	<u>31</u>	Twp	<u>37S</u>	Rng	<u>24E</u>	Lease Type:	<u>U51846</u>
Name:	<u>MCCRACKEN SPRING 4-31</u>	API:	<u>43-037-31393</u>	Entity:	<u>8431</u>	Sec	<u>31</u>	Twp	<u>37S</u>	Rng	<u>24E</u>	Lease Type:	<u>U51846</u>
Name:	_____	API:	_____	Entity:	_____	Sec	_____	Twp	_____	Rng	_____	Lease Type:	_____
Name:	_____	API:	_____	Entity:	_____	Sec	_____	Twp	_____	Rng	_____	Lease Type:	_____
Name:	_____	API:	_____	Entity:	_____	Sec	_____	Twp	_____	Rng	_____	Lease Type:	_____
Name:	_____	API:	_____	Entity:	_____	Sec	_____	Twp	_____	Rng	_____	Lease Type:	_____

OPERATOR CHANGE DOCUMENTATION

1. (Rule R615-8-10) Sundry or other legal documentation has been received from former operator (Attach to this form). *(Reg. 12-28-95) (Reg. 2-12-96) (Reg. 7-23-96) (Rec'd 7-31-96)*
2. (Rule R615-8-10) Sundry or other legal documentation has been received from new operator (Attach to this form). *(Rec'd 12-27-95)*
- N/A 3. The Department of Commerce has been contacted if the new operator above is not currently operating any wells in Utah. Is company registered with the state? (yes/no) ____ If yes, show company file number: _____.
4. (For Indian and Federal Wells ONLY) The BLM has been contacted regarding this change (attach Telephone Documentation Form to this report). Make note of BLM status in comments section of this form. Management review of **Federal and Indian** well operator changes should take place prior to completion of steps 5 through 9 below.
5. Changes have been entered in the Oil and Gas Information System (Wang/IBM) for each well listed above. *(7-29-96)*
6. Cardex file has been updated for each well listed above. *(7-29-96)*
7. Well file labels have been updated for each well listed above. *(7-29-96)*
8. Changes have been included on the monthly "Operator, Address, and Account Changes" memo for distribution to State Lands and the Tax Commission. *(7-29-96)*
9. A folder has been set up for the Operator Change file, and a copy of this page has been placed there for reference during routing and processing of the original documents.

ENTITY REVIEW

- Y 1. (Rule R615-8-7) Entity assignments have been reviewed for all wells listed above. Were entity changes made? (yes/no) ____ (If entity assignments were changed, attach copies of Form 6, Entity Action Form).
- N/A 2. State Lands and the Tax Commission have been notified through normal procedures of entity changes.

BOND VERIFICATION (Fee wells only)

- N/A 1. (Rule R615-3-1) The new operator of any fee lease well listed above has furnished a proper bond.
- ____ 2. A copy of this form has been placed in the new and former operators' bond files.
- ____ 3. The former operator has requested a release of liability from their bond (yes/no) ____.
Today's date _____ 19____. If yes, division response was made by letter dated _____ 19____.

LEASE INTEREST OWNER NOTIFICATION RESPONSIBILITY

- N/A 1. (Rule R615-2-10) The former operator/lessee of any fee lease well listed above has been notified by letter dated _____ 19____, of their responsibility to notify any person with an interest in such lease of the change of operator. Documentation of such notification has been requested.
- N/A 2. Copies of documents have been sent to State Lands for changes involving State leases.

FILMING

- VDR 1. All attachments to this form have been microfilmed. Date: August 8 1996.

FILING

- ____ 1. Copies of all attachments to this form have been filed in each well file.
- ____ 2. The original of this form and the original attachments have been filed in the Operator Change file.

COMMENTS

960729 Bm/mcab Apr. 7-24-96 et. 12-1-95.

FORM 9

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells. Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such proposals.

1. Type of Well: OIL <input checked="" type="checkbox"/> GAS <input type="checkbox"/> OTHER: _____		5. Lease Designation and Serial Number: U-51846
2. Name of Operator: Marathon Oil Company		6. If Indian, Alutian or Tribe Name: _____
3. Address and Telephone Number: P. O. Box 552, Midland, TX 79702 (915) 682-1626		7. Unit Agreement Name: _____
4. Location of Well Footages: 2,356' FNL & 1,320' FEL Co. Sec., T., R., M.: _____		8. Well Name and Number: 4-31
		9. API Well Number: 43-037-31393
		10. Field and Pool, or Wildcat: McCracken Spring
		County: San Juan State: Utah

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

NOTICE OF INTENT (Submit in Duplicate)	SUBSEQUENT REPORT (Submit Original Form Only)
<input type="checkbox"/> Abandon <input type="checkbox"/> Repair Casing <input type="checkbox"/> Change of Plans <input type="checkbox"/> Convert to Injection <input type="checkbox"/> Fracture Treat or Acidize <input type="checkbox"/> Multiple Completion <input type="checkbox"/> Other _____	<input type="checkbox"/> Abandon * <input type="checkbox"/> Repair Casing <input type="checkbox"/> Change of Plans <input type="checkbox"/> Convert to Injection <input type="checkbox"/> Fracture Treat or Acidize <input type="checkbox"/> Other _____
<input type="checkbox"/> New Construction <input type="checkbox"/> Pull or Alter Casing <input type="checkbox"/> Recomplete <input type="checkbox"/> Perforate <input type="checkbox"/> Vent or Flare <input type="checkbox"/> Water Shut-Off	<input type="checkbox"/> New Construction <input type="checkbox"/> Pull or Alter Casing <input type="checkbox"/> Perforate <input type="checkbox"/> Vent or Flare <input type="checkbox"/> Water Shut-Off
Approximate date work will start _____	Date of work completion _____
	Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION REPORT AND LOG form. * - Must be accompanied by a cement verification report.

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Marathon Oil Company sold this well to new operator Robert Bayless, effective date 12-1-95.

13. Name & Signature: Robert M. Muth Title: Engineering Technician Date: 7/30/96

(This space for State use only)

Form 3160-5
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: November 30, 2000
5. Lease Serial No.
U-51846
6. If Indian, Allottee or Tribe Name
7. If Unit or CA/Agreement, Name and/or No.

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator
 Robert L. Bayless, Producer LLC

3a. Address
 PO Box 168, Farmington, NM 87499

3b. Phone No. (include area code)
 (505) 326-2659

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
 2356' FNL & 1320' FEL, Sec. 31, T37S, R24E

8. Well Name and No.
 McCracken Springs 4-31

9. API Well No.
 43-037-31393

10. Field and Pool, or Exploratory Area
 McCracken Springs

11. County or Parish, State
 San Juan, Utah

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input checked="" type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, A Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Bayless plans to dispose of some of its produced water at the City of Blanding, Utah for dust control. Some of the water will still be disposed of at Tincup Mesa or Lisbon Valley Hazmat.

COPY SENT TO OPERATOR
 Date: 7-3-02
 Initials: CLO

APPROVED BY THE STATE
 OF UTAH DIVISION OF
 OIL, GAS, AND MINING
 DATE: 7-2-02
 BY: [Signature]
 Attached Confidential

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

Name (Printed/Typed)
 THOMAS MCCARTHY

Title
 ENGINEER

Signature [Signature]

Date
 6/10/02

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by _____ Title _____ Date _____

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operation thereon.

Office _____

Title 18 U.C.S. Section 1001 and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make any department or agency of the United States any false, scintious or fraudulent statements or representations as to any matter within its jurisdiction.

RECEIVED
 JUN 10 2002
 DIVISION OF
 OIL, GAS AND MINING

Federal Approval of this
 Action is Necessary

**Sundry Notice
Approval Conditions**

Well Names: Deadman Canyon Federal 1-28, 1-20, 2-20
McCracken Springs 1-31, 4-31

Sundry Date: 6-10-02

Proposed Action: Use of Produced Water for Dust Control

Conditions of Approval:

This is a temporary approval, for one year, issued due to drought conditions being experienced in Utah. Refer to the attached letter from the Utah Division of Water Quality concerning restricted use by the City of Blanding.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		8. Well Name and No. McCracken Springs 4-31
2. Name of Operator Robert L. Bayless, Producer LLC		9. API Well No. 43-037-31393
3a. Address PO Box 168, Farmington, NM 87499	3b. Phone No. (include area code) (505) 326-2659	10. Field and Pool, or Exploratory Area McCracken Springs
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 2356' FNL & 1320' FEL, Sec. 31, T37S, R24E		11. County or Parish, State San Juan, Utah

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	_____
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input checked="" type="checkbox"/> Water Disposal	_____

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, A Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Bayless plans to dispose of some of its produced water at the City of Blanding, Utah for dust control. Some of the water will still be disposed of at Tincup Mesa or Lisbon Valley Hazmat.

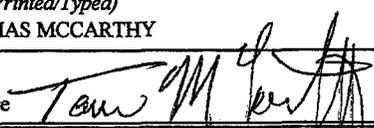
Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY

RECEIVED

JUN 14 2002

**DIVISION OF
OIL, GAS AND MINING**

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

Name (Printed/Typed) THOMAS MCCARTHY	Title ENGINEER
Signature 	Date 6/10/02

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operation thereon.	Office	

Title 18 U.C.S. Section 1001 and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF WATER QUALITY

Michael O. Leavitt
Governor

Dianne R. Nielson, Ph.D.
Executive Director

Don A. Ostler, P.E.
Director

288 North 1460 West
P.O. Box 144870
Salt Lake City, Utah 84114-4870
(801) 538-6146
(801) 538-6016 Fax
(801) 536-4414 T.D.D.
www.deq.state.ut.us Web

Water Quality Board
K.C. Shaw, P.E.
Chairman

William R. Williams
Vice-Chairman

Robert G. Adams
Nan Bunker

Ray M. Child, C.P.A.

John R. Cushing, Mayor

Neil K. Kochenour, M.D.

Dianne R. Nielson, Ph.D.

Ronald C. Sims, Ph.D.

Douglas E. Thompson, Mayor

J. Ann Wechsler

Don A. Ostler, P.E.

Executive Secretary

June 26, 2002

Mr. Lowell Braxton, Director
Division of Oil, Gas and Mining
Department of Natural Resources
1594 W North Temple, Suite 1210
Salt Lake City, UT 84114-5801

Lowell
Dear Mr. Braxton:

Subject: Use of brine for dust suppression

This is in regards to a request made by the City of Blanding to use produced water on an unpaved road for dust suppression and to allow the road to be graded and recompact to remove washboard. This request, as explained by Mr. Danny Fleming, City Water Superintendent, is related to the severe draught currently being experienced in southern Utah resulting in the unavailability of other sources of water.

The Division of Water Quality is certainly sensitive to the problems and special needs of rural communities of the State being brought on by the draught. We understand the brine will be used very conservatively based on the cost of transport. Therefore, we would not expect any runoff or pooling of brine to create any significant surface or ground water quality risk. Furthermore, the brine would be applied to less than one mile of roadway, and only for this year, assuming the draught will hopefully end.

Based on the above, we have no objection to the City applying the brine according to the restrictions contained herein. This is not to be construed as a precedent for the indiscriminant or otherwise unauthorized disposal of produced water from oil and gas wells.

Sincerely,

Don A. Ostler, P.E.

Director

Utah Division of Water Quality

DAO:FCP:bjr

Fpehrson\wp\producedwater a.doc

RECEIVED

JUN 27 2002

**DIVISION OF
OIL, GAS AND MINING**

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

5. Lease Designation and Serial Number:

UTU - 51846

SUNDRY NOTICES AND REPORTS ON WELLS

6. If Indian, Allottee or Tribe Name:

Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.

Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such proposals.

7. Unit Agreement Name:

1. Type of Well:

OIL GAS OTHER:

8. Well Name and Number:

McCracken Springs 4-31

2. Name of Operator:

ROBERT L. BAYLESS

9. API Well Number:

43-037-31393

3. Address and Telephone Number:

P.O. BOX 168, FARMINGTON, NM 87499 (505) 326-2659

10. Field and Pool, or Wildcat:

McCracken Springs

4. Location of Well:

Footages: ⁶⁵ 2356' FNL & 1320' FEL

County: San Juan

QQ, Sec., T.,R.,M.: Sec. 31, T37S, R24E

State: Utah

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

NOTICE OF INTENT

(Submit in Duplicate)

- Abandonment
- Casing Repair
- Change of Plans
- Conversion to Injection
- Fracture Treat
- Multiple Completion
- Other _____
- New Construction
- Pull or Alter Casing
- Recompletion
- Shoot or Acidize
- Vent or Flare
- Water Shut-Off

Approximate date work will start _____

SUBSEQUENT REPORT

(Submit Original Form Only)

- Abandonment *
- Casing Repair
- Change of Plans
- Conversion to Injection
- Fracture Treat
- Other Annual Status Report
- New Construction
- Pull or Alter Casing
- Shoot or Acidize
- Vent or Flare
- Water Shut-Off

Date of work completion _____

Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form.

* Must be accompanied by a cement verification report.

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Annual Status Report:

The McCracken Springs Well No. 4-31 is shut-in due to uneconomic production.

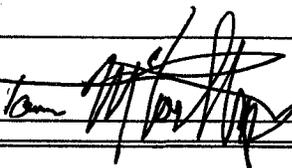
RECEIVED

MAR 06 2003

DIV. OF OIL, GAS & MINING

13.

Name & Signature



Thomas McCarthy

Title: Engineer

Date: 2/27/03

(This space for State use only)

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

FORM 9

5. LEASE DESIGNATION AND SERIAL NUMBER:

U-51846

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. TYPE OF WELL OIL WELL GAS WELL OTHER _____

8. WELL NAME and NUMBER:
McCracken Springs 4-31

2. NAME OF OPERATOR:
Robert L. Bayless, Producer LLC

9. API NUMBER:
43-037-31393

3. ADDRESS OF OPERATOR:
PO Box 168 CITY Farmington STATE NM ZIP 87499

PHONE NUMBER:
(505) 326-2659

10. FIELD AND POOL, OR WILDCAT:
McCracken Springs

4. LOCATION OF WELL
FOOTAGES AT SURFACE: ²³⁶⁵~~2165~~ FNL & 1320' FEL,

COUNTY: San Juan

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Sec. 31 T37S R24 E

STATE: UTAH

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

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

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

RECEIVED

APR 25 2005

DIV. OF OIL, GAS & MINING

COPY SENT TO OPERATOR

Date: 5-4-05
Initials: CHD

NAME (PLEASE PRINT) Thomas McCarthy

TITLE Petroleum Engineer

SIGNATURE *Thomas McCarthy*

DATE 4/19/2005

(This space for State use only)

Accepted by the
Utah Division of
Oil, Gas and Mining

Federal Approval Of This
Action Is Necessary

Date: 5/12/05
By: *[Signature]*

PLUG AND ABANDONMENT PROCEDURE

April 5, 2005

McCracken Spring #4-31 – Ismay

2365' FNL & 1320' FEL, Section 31, T037S, R024E
San Juan County, UT / API 43-037-31393

Note: All cement volumes use 100% excess outside pipe and 50' excess inside pipe. The stabilizing wellbore fluid will be 8.3 ppg, sufficient to balance all exposed formation pressures. All cement will be ASTM Type III, mixed at 14.8 ppg with a 1.32 cf/sx yield.

1. Install and test location rig anchors. Prepare blow pit. Comply with all UOGM, BLM, and Bayless safety regulations. MOL and RU daylight pulling unit. Conduct safety meeting for all personnel on location. NU relief line and blow down well; kill with water as necessary.
2. ND wellhead and NU BOP. Test BOP. Release tubing anchor. TOH with 202 joints 2.875" tubing, total 6172'. Visually inspect tubing, if necessary use a workstring.
3. **Plug #1 (Ismay perforations and top, 6000' – 5900')**: TIH and set a 5.5" cement retainer at 6000'. Pressure test tubing to 1000#. Load casing with water and circulate well clean. Pressure test casing to 800#. If casing does not test, then spot or tag subsequent plugs as appropriate. Mix 15 sxs cement and spot a balanced plug inside casing above the CR to isolate the Ismay perforations and cover the top. PUH to 4966'.
4. **Plug #2 (Honaker Trail top, 4966' – 4866')**: Mix 15 sxs cement and spot a balanced plug inside casing to cover the Honaker Trail top. PUH to 3138'.
5. **Plug #3 (Cutler top, 3138' – 3038')**: Mix 15 sxs cement and spot a balanced plug inside casing to cover the Cutler top. TOH with tubing.
6. **Plug #4 (9.625" Casing shoe and Chinle top, 2277' – 2061')**: Perforate 3 squeeze holes at 2277'. If casing tested then establish a rate into the squeeze holes. TIH and set a 5.5" cement retainer at 2227'. Establish rate under the CR. Mix 107 sxs cement, squeeze 80 sxs outside the 5.5" casing and leave 27 sxs inside casing. TOH with tubing.
7. **Plug #5 (Navajo and Entrada tops, 1264' – 962')**: Perforate 3 squeeze holes at 1264'. If casing tested, then establish rate into the squeeze holes. TIH with tubing to 1264'. Mix and spot 109 sxs cement; pull up out of the cement and then squeeze 74 sxs into the 5.5" x 9.625" annulus, leaving 35 sxs inside casing at 900' to cover the Navajo and Entrada tops. TOH with tubing and WOC. If the casing does not test before perforating, then set a 5.5" cement retainer at 1214'. If no CR used, then TIH and tag cement.
8. **Plug #6 (Surface, 100' - Surface)**: Perforate 3 squeeze holes at 100'. Establish circulation out the bradenhead valve with water. Mix and pump approximately 60 sxs cement down the 5.5" casing to circulate good cement out bradenhead valve. Shut well in and WOC.
9. ND BOP and cut off casing below surface. Install P&A marker with cement to comply with regulations. RD, move off location, cut off anchors and restore location.

INSTRUCTIONS

This form shall be submitted by the operator to show the intention and/or completion of the following:

- miscellaneous work projects and actions for which other specific report forms do not exist;
- all other work and events as identified in section 11, Type of Action, or as required by the Utah Oil and Gas Conservation General Rules, including:
 - minor deepening of an existing well bore,
 - plugging back a well,
 - recompleting to a different producing formation within an existing well bore (intent only),
 - re-perforating the current producing formation,
 - drilling a sidetrack to repair a well,
 - reporting monthly the status of each drilling well.

This form is not to be used for proposals to

- drill new wells,
- reenter previously plugged and abandoned wells,
- significantly deepen existing wells below their current bottom-hole depth,
- drill horizontal laterals from an existing well bore,
- drill hydrocarbon exploratory holes such as core samples and stratigraphic tests.

Use Form 3, Application for Permit to Drill (APD) for such proposals.

NOTICE OF INTENT - A notice of intention to do work on a well or to change plans previously approved shall be submitted in duplicate and must be received and approved by the division before the work is commenced. The operator is responsible for receipt of the notice by the division in ample time for proper consideration and action. In cases of emergency, the operator may obtain verbal approval to commence work. Within five days after receiving verbal approval, the operator shall submit a Sundry Notice describing the work and acknowledging the verbal approval.

SUBSEQUENT REPORT - A subsequent report shall be submitted to the division within 30 days of the completion of the outlined work. Specific details of the work performed should be provided, including dates, well depths, placement of plugs, etc.

WELL ABANDONMENT - Proposals to abandon a well and subsequent reports of abandonment should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, and method of parting of any casing, liner, or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.

In addition to any Sundry Notice forms submitted, **Form 8, Well Completion or Recompletion Report and Log** must be submitted to the division to report the results of the following operations:

- completing or plugging a new well,
- reentering a previously plugged and abandoned well,
- significantly deepening an existing well bore below the current bottom-hole depth,
- drilling horizontal laterals from an existing well bore,
- drilling hydrocarbon exploratory holes such as core samples and stratigraphic tests,
- recompleting to a different producing formation.

Send to:

Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

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

FORM 9

5. LEASE DESIGNATION AND SERIAL NUMBER:

U-51846

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. TYPE OF WELL OIL WELL GAS WELL OTHER _____

8. WELL NAME and NUMBER:
McCracken Springs No. 4-31

2. NAME OF OPERATOR:
Robert L. Bayless, Producer LLC

9. API NUMBER:
43-037-31393

3. ADDRESS OF OPERATOR:
PO Box 168 CITY Farmington STATE NM ZIP 87499

PHONE NUMBER:
(505) 326-2659

10. FIELD AND POOL, OR WLD/CAT:
McCracken Springs

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2365' FNL & 1320' FEL

COUNTY: San Juan County

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Sec. 31 T37S R24 E

STATE: UTAH

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

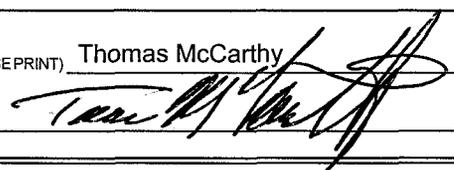
TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input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

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

See attached report.

NAME (PLEASE PRINT) Thomas McCarthy

TITLE Petroleum Engineer

SIGNATURE 

DATE 10/11/2005

(This space for State use only)

RECEIVED
OCT 11 / 2005

DIV OF OIL GAS & MINING

INSTRUCTIONS

This form shall be submitted by the operator to show the intention and/or completion of the following:

- miscellaneous work projects and actions for which other specific report forms do not exist;
- all other work and events as identified in section 11, Type of Action, or as required by the Utah Oil and Gas Conservation General Rules, including:
 - minor deepening of an existing well bore,
 - plugging back a well,
 - recompleting to a different producing formation within an existing well bore (intent only),
 - re-perforating the current producing formation,
 - drilling a sidetrack to repair a well,
 - reporting monthly the status of each drilling well.

This form is not to be used for proposals to

- drill new wells,
- reenter previously plugged and abandoned wells,
- significantly deepen existing wells below their current bottom-hole depth,
- drill horizontal laterals from an existing well bore,
- drill hydrocarbon exploratory holes such as core samples and stratigraphic tests.

Use Form 3, Application for Permit to Drill (APD) for such proposals.

NOTICE OF INTENT - A notice of intention to do work on a well or to change plans previously approved shall be submitted in duplicate and must be received and approved by the division before the work is commenced. The operator is responsible for receipt of the notice by the division in ample time for proper consideration and action. In cases of emergency, the operator may obtain verbal approval to commence work. Within five days after receiving verbal approval, the operator shall submit a Sundry Notice describing the work and acknowledging the verbal approval.

SUBSEQUENT REPORT - A subsequent report shall be submitted to the division within 30 days of the completion of the outlined work. Specific details of the work performed should be provided, including dates, well depths, placement of plugs, etc.

WELL ABANDONMENT - Proposals to abandon a well and subsequent reports of abandonment should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, and method of parting of any casing, liner, or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.

In addition to any Sundry Notice forms submitted, **Form 8, Well Completion or Recompletion Report and Log** must be submitted to the division to report the results of the following operations:

- completing or plugging a new well,
- reentering a previously plugged and abandoned well,
- significantly deepening an existing well bore below the current bottom-hole depth,
- drilling horizontal laterals from an existing well bore,
- drilling hydrocarbon exploratory holes such as core samples and stratigraphic tests,
- recompleting to a different producing formation.

Send to:

Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

A-PLUS WELL SERVICE, INC.

P.O. BOX 1979

Farmington, New Mexico 87499

505-325-2627 * fax: 505-325-1211

Robert L. Bayless

September 28, 2005

McCracken Spring #4-31

2365' FNL & 1320' FEL, Section 31, T-37-S, R-24-E

San Juan County, UT

Lease Number: U-51846, API #43-037-31393

Plug & Abandonment Report

Summary:

Notified Utah BLM on 9/19/05

- 9/20/05 MOL and RU rig. Well pressures: tubing 30#, casing and bradenhead 0#. ND wellhead. PU on tubing and release anchor. NU BOP, test. Shut in well.
- 9/21/05 Tally 2.875" tubing. POH with 1200'. Tubing plugged with paraffin. Load casing with 60 bbls of hot water and load tubing with 40 bbls of hot water. POH with 6 stands tubing, still had heavy paraffin. Load tubing with 50 bbls of hot water. Shut in well.
- 9/22/05 Continue to TOH. Pulled 202 joints 2.875" tubing and 5.5" anchor. TIH and set 5.5" DHS CR at 6012'. Pressure test tubing to 1300#, held OK. Sting out of CR. Load casing with 18 bbls of water. Pressure test casing to 800#, held OK. Roll the wellbore with 150 bbls of 9.0 ppg mud.
Plug #1 with CR at 6012', spot 16 sxs Type III cement (21 cf) inside casing above CR up to 5850' to isolate the Ismay perforations and top. PUH to 4975'. Shut in well.
- 9/23/05 Load casing with water. Pressure test casing to 800#, held OK.
Plug #2 with 16 sxs Type III cement (21 cf) inside casing from 4975' to 4813' to cover the Honaker Trail top.
PUH to 3144'.
Plug #3 with 16 sxs Type III cement (21 cf) inside casing from 3144' to 2982' to cover the Cutler top.
PUH to 2228'. Perforate 3 holes at 2278'. Load casing and attempt to establish rate into squeeze holes, pressured to 2000#. BLM required additional perforations at 2228'. Attempt to establish rate, pressured to 2000#. BLM approved procedure change. TIH with tubing to 2327'.
Plug #4 with 25 sxs Type III cement (33 cf) inside casing from 2327' to 2075' to cover the 9.625" casing shoe and Chinle top.
PUH to 1312'. Shut in well.
- 9/26/05 Load casing with 8 bbls of water. Pressure test casing to 800#, held OK. TIH and tag cement at 1729'. Procedure change by Eric Jones, Utah BLM: required perforations at 1370'. Establish rate into squeeze holes 2 bpm at 800#. TIH with 5.5" DHS CR and set at 1312'. Establish rate into squeeze holes under the CR, 2 bpm at 800#.
Plug #5 with CR at 1312, mix and pump 139 sxs Type III cement (183 cf), squeeze 99 sxs outside the casing and leave 40 sxs inside casing up to 908' to cover the Navajo and Entrada tops.
TOH and LD all tubing. Perforate 3 holes at 100'. Load casing with water and establish circulation out the bradenhead.
Plug #6 with 36 sxs Type III cement (48 cf) pump down 5.5" casing from 100' to surface, circulate good cement out bradenhead. Shut in well. ND BOP. Dig out and cut off wellhead. Mix 20 sxs Type III cement and install P&A marker.
Jeff Brown and Eric Jones, Utah BLM representatives, were on location.