

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

P-154191-a

FORM APPROVED
OMB NO. 42-R1599

Serial No. **U-33967**

New Serial No.

**PARTIAL ASSIGNMENT AFFECTING RECORD TITLE
TO OIL AND GAS LEASE
PART I**

Nyal G. Cole
P. O. Box 666
Price, Utah 84501

The undersigned, as owner of **100** percent of record title of the above-designated oil and gas lease issued effective (date) **August 1, 1976**, hereby transfers and assigns to the assignee shown above, the record title interest in and to such lease as specified below.

2. Describe the lands affected by this assignment (43 CFR 3101.2-3)

Township 19 South, Range 10 East
Section 23: All

***Subject to Assignment and Agreement, dated 8/26/77, by and between Phillips Petroleum Company and Nyal G. Cole.**

3. What part of assignor(s) record title interest is being conveyed to assignee? (Give percentage or share) **100%**

4. What part of the record title interest is being retained by assignor(s)? **None**

5a. What overriding royalty or production payments is the assignor reserving herein? (See Item 4 of General Instructions; specify percentage.) **None**

b. What overriding royalties or production payments, if any, were previously reserved or conveyed? (Percentage only) **None**

It is agreed that the obligation to pay any overriding royalties or payments out of production of oil created herein, which, when added to overriding royalties or payments out of production previously created and to the royalty payable to the United States, aggregate in excess of 17½ percent, shall be suspended when the average production of oil per well per day averaged on the monthly basis is 15 barrels or less.

I CERTIFY That the statements made herein are true, complete, and correct to the best of my knowledge and belief and are made in good faith.

Executed this **12th** day of **September**, 19 **77**

J. E. Downey
Attorney in Fact
For Phillips Petroleum Co.
Power of Attorney is
Still in Effect and Filed
in U-0142200

1300 Security Life Building

(Assignor's Address)

J. E. Downey
(Assignor's Signature)
J. E. DOWNEY
Attorney-in-Fact for
Phillips Petroleum Company

Denver, Colorado

80202

(City)

(State)

(Zip Code)

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

STATE OF COLORADO }
CITY AND COUNTY OF DENVER) ss.

On the 12th day of September, 19 77, personally appeared before me J. E. DOWNEY, who, being by me duly sworn did say that he is the Attorney-in-Fact of PHILLIPS PETROLEUM COMPANY, and that said instrument was signed in behalf of said PHILLIPS PETROLEUM COMPANY by authority, and said J. E. DOWNEY, acknowledged to me that he as such Attorney-in-Fact, executed the same.

Edda Munoz
NOTARY PUBLIC

My Commission Expires: 12/3/80
Residing at: Denver, Colorado

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
 DRILL DEEPEN PLUG BACK
 b. TYPE OF WELL
 OIL WELL GAS WELL OTHER SINGLE ZONE MULTIZONE

2. NAME OF OPERATOR
 Nyal G. Cole

3. ADDRESS OF OPERATOR
 P. O. Box 666, Price, Utah, 84501

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
 At surface, ~~3032.49~~ 3032.49 feet South and ~~3864.93~~ 3864.93 feet from 2801 (East) the NW corner of Section 23, T19S, R10E, S.L.B. & M.
 At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 12 miles East of Castledale, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. 2415.07 feet
 (Also to nearest drlg. unit line, if any)

16. NO. OF ACRES IN LEASE
 2560 acres

17. NO. OF ACRES ASSIGNED TO THIS WELL
 40 acres

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. None on lease

19. PROPOSED DEPTH
 2500 feet

20. ROTARY OR CABLE TOOLS
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 5691 G.L.

12. COUNTY OR PARISH 13. STATE
 Emery Utah
 22. APPROX. DATE WORK WILL START*
 January 1, 1978

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
8 1/2"	7"	23#	100 feet	20 sacks
6 1/2"	2 7/8"	6 3/4#	1495 feet	30 sacks

It is proposed to drill out from casing with 6 1/4" using water-gel medium to 1453 feet, switch to water polymer-mud and core Sinbad member of Moenkopi. An E log taken and if warranted, drill stem test. If Production, run string 2 7/8" tubing, cement with 30 sacks and perforate at Sinbad. If not, drill ahead checking potential pay sands as described above to Kaibab at 2500 feet. If any sands producible, to be completed as described above.

Shaffer type 45 B.O.P. will be used with 1 kill line.

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

NOTICE OF APPROVAL

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 Nyal G. Cole TITLE _____ DATE 11-25-77

(This space for Federal or State office use)

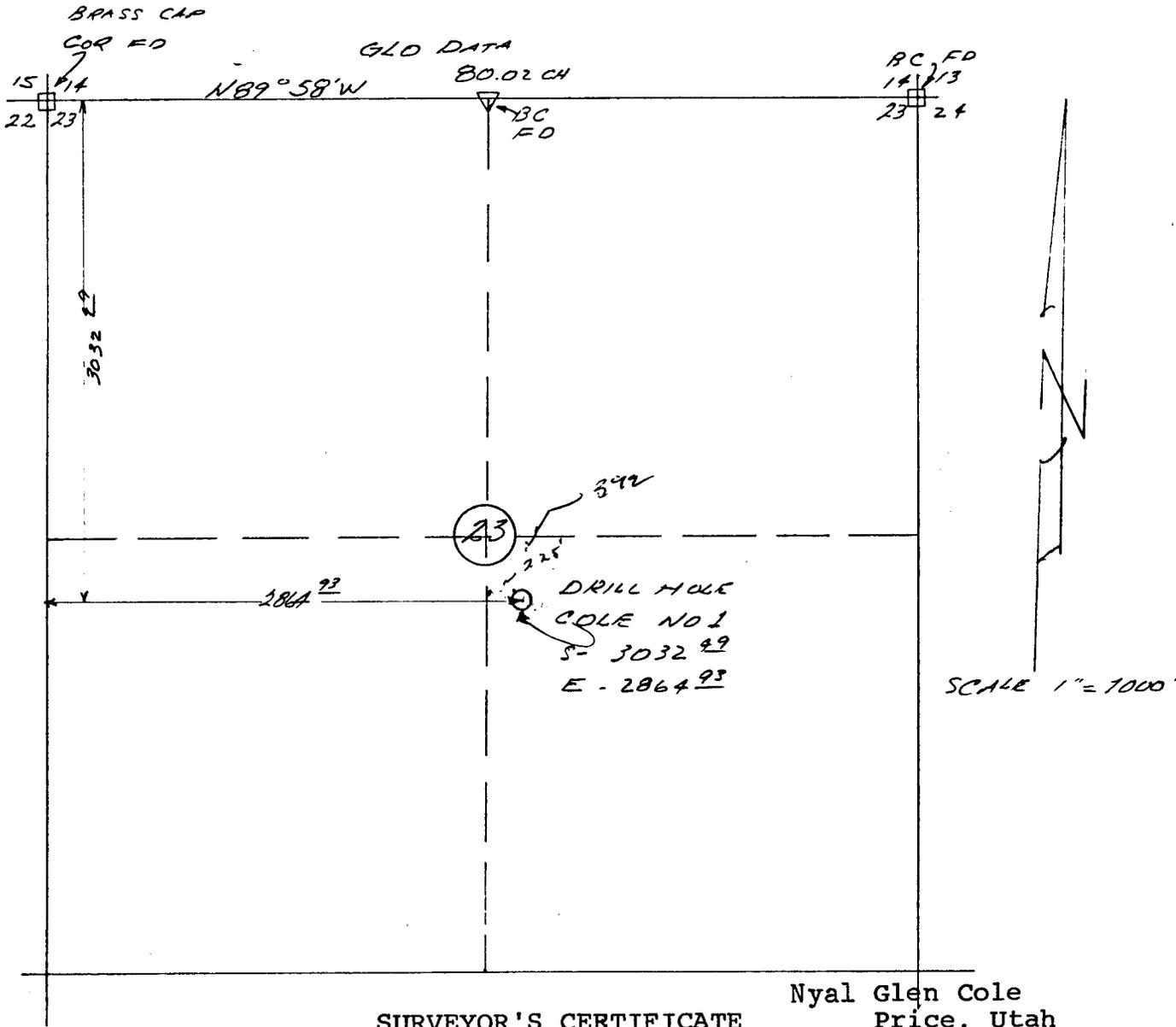
PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY (Orig. Sgd.) E. W. GUYDIL TITLE DISTRICT ENGINEER DATE MAY 18 1978

CONDITIONS OF APPROVAL, IF ANY:

CONDITIONS OF APPROVAL ATTACHED TO OPERATOR'S COPY See Instructions On Reverse Side

NECESSARY FLARING OF GAS DURING DRILLING AND COMPLETION APPROVED SUBJECT TO ROYALTY (NTL-4)



SURVEYOR'S CERTIFICATE

Nyal Glen Cole
Price, Utah

I Albert J. Spensko, duly registered and certified to practice Land Surveying, and holding license No. 3490, do hereby certify that I have surveyed the following drill site for Glen Cole, Price, Utah.

The following drill site is located in Emery County.

Drill Hole Cole No. 1 Located at a point 3032.49 feet South and 2864.93 feet East from the NW Corner of Section 23, T.19S., R.10E., S.L.B.&M.

Date 11-14-77


 Albert J. Spensko

November 22, 1977

Mr. Edgar W. Guynn
U. S. Geological Survey
Salt Lake City, Utah

Re: N.T.L.-6 Information
Drilling - Cole #1

Dear Mr. Guynn:

I wish to submit the following answers to questions regarding the Drilling of the well:

- Item 1. Surface Formation is the Carmel.
- Item 2. Sinbad at 1450 feet.
Kaibab at 2500 feet.
- Item 3. The depth of anticipated oil bearing formation is 1457 feet, the Sinbad member of the Moenkopi. If tests prove formation non-commercial, operations will be drill ahead and test the lower sands of the Moenkopi and further potential pay sands to the anticipated top of the Kaibab at 2500 feet.
- Item 4. The casing program is proposed as follows:
 - A. Surface casing will be 7" 23# T & C used pipe with 20 sacks of cement.
 - B. Production string will be 2 7/8" EUE 8RD J55 6 1/2# used tubing set to 30 feet below production zone with 30 sacks of cement.
- Item 5. Pressure control equipment will be as follows:
 - A. B.O.P. will be a single ram, manual closing, probably type 45 Shaffer 7" gate, API Series 6" - 900. Working pressure 3000#, test pressure 6000#, 2 7/8" rubbers.
 - B. Kill-relief line from Braden Head to reserve pit area (30') valves at head and pit end. Valves and line will be 1000 PSI working pressure. B.O.P. test will be to hold 500# for 1 hour every 24 hours.
- Item 6. Circulating mediums will be water base:
 - A. Spud mud will be gel-water type for purpose of drilling for surface pipe.
 - B. Fluid for drilling to top of potential pay zone will be gel-water with polymers to 50%.
 - C. Fluid for coring and reaming Sinbad will be water-polymers to completion.
 - D. Weight material, Barite, will be on location but not maintained in mud system as no pressure problems are anticipated and are unlikely in this area.
 - E. Pit volume to be 35 barrels, 50 to 200 barrels reserve.
- Item 7. Auxiliary equipment will include:
 - A. Float at bit.
 - B. Hydro carbon monitor at flow line.
 - C. Full opening valve for use in DP when the kelly is out of string.
- Item 8. The program for testing:
 - A. Core to be taken from 1452' through Sinbad for analysis.
 - B. Electric log.
 - C. Drill stem test if warranted.

If the Sinbad does not prove out, cores, electric logs, and possibly drill stem tests of potential pay sands will be taken if warranted as drilling ahead to Kaibab.

November 22, 1977

Mr. Edgar W. Gynn
U. S. Geological Survey
Salt Lake City, Utah

Re: NTL-6 Information
Drilling - Cole #1

- Item 9. No abnormalities or hazards are expected as area research gives no cause for concern.
- Item 10. We would like to be started by January 1, 1978, and duration of operations, hopefully through completion, twenty days.

Yours truly,

Sam B Cole

November 22, 1977

Checksheet for NTL-6
Cole #1

1. Existing Roads

- A. See U.S.G.S. map enclosed. Location is on location of abandoned Bush #1 and no further clearing is necessary.
- B. See U.S.G.S. enclosed map.
- C. N/A.
- D. See roads on enclosed U.S.G.S. map. The roads are graveled and improved in the area except the existing road by the location which is natural surface and semi-improved.
- E. N/A.
- F. No improvements are planned; however, maintenance is planned in inclement weather to permit access unless serious road and equipment damage might result from continued use, then operations to cease until roads dry or frozen.

2. Planned Access Roads

No new roads are planned as location is immediately adjacent to an existing road.

3. Location of existing Wells:

- (1) Buckhorn Well to North West 2 miles. See enclosed U.S.G.S. map.
- (2) Abandoned Well Bush #1 3100.24 feet from North line, 2415.41 feet from East Line, Sec. 23, T19S, R10E. See U.S.G.S. map.
- (3) through (9) - N/A.

4. Location of Existing and/or Proposed Facilities

- A. N/A.
- B. See enclosed map. Production Facilities
 - (1) All lines and facilities will be on well pad.
 - (2) 2 - 200 Barrel Tanks 50 feet east of well, placed on 8 foot mount, a 40 foot square sump to be placed 50 feet North of tanks, banked and gently sloped to a depth of 8 feet and approximately 20 feet square at that depth. A catch dike laid out in a semi-circle running from west of well to north of sump to east of tanks at a height of 4 feet at northern most point where pad is at lowest level then tapered to ground level at east and west side where dike will be situated to catch all possible spills from production facilities.

Checksheet for NTL-6
Cole #1

- (3) Sump excavation to furnish material for mound for tank placement. Remaining material will be formed into the above mentioned dike. Also gentle contouring may be required to the east and west of facilities in order to totally utilize dike in the event of a spill so that nothing could get around the dike.
- (4) Pump Jack and sump will be fenced with a mesh type fencing material to height of 4 feet.

C. Disturbed areas no longer needed for operations will be recontoured and reseeded during and after construction.

5. Location and type of water supply

- A. Water supply to be Huntington Creek 10 miles west of location.
- B. Water shall be trucked on existing roads.
- C. N/A.

6. Source of construction Materials

- A. Described below.
- B. Federal land.
- C. Location surface alluvium to be used for dikes, sump and mound without major alteration to contour for production facilities. For drilling program no materials necessary.
- D. N/A.

7. Methods for Handling Waste Disposal

- (1) All cuttings will be jetted to the reserve pit.
- (2) Drilling fluids will be mixed with subsurface soils as pits are being covered to avoid spillage and settlings. Surface soil to be replaced as such.
- (3) Produced fluid will be pumped to an unlined pit to be fenced if necessary for duration of test. Oil, in large amounts, pumped out to pit and then used as road oil or burned; whatever is acceptable and practical. Water to be evaporated, used to water roads, water livestock if uncontaminated or, if contaminated, and too large a quantity to evaporate or to be injected to a safe formation.
- (4) Chemical toilets for sewage.
- (5) Solids to be hauled to local dump. Trash to be burned in wire mesh covered pit.

7. Methods for Handling Waste Disposal - Continued

- (6) The area will be void of any trash or mess and in as a natural state as possible.

8. Ancillary Facilities: N/A.9. Well Site Layout

- (1) The only cut will be the reserve pit which will be 8 feet deep, 160 feet long, 12 feet wide with four compartments. All excavated materials piled at each end of pit.
- (2) See enclosed location map.
- (3) As above.
- (4) Reserve pit to be unlined. Note - This location is situated on location of abandoned Bush #1. Clearing has been done from Bush #1 as follows: 150' North, 100' East, 100' South and to the road on the West.

10. Plans for Restoration of Surface

- (1) Land will be returned as near to contour as is possible, waste and spoils handled as specified in previous sections if to be abandoned. If well to be put into production, these measures will be in conjunction with construction of production facilities.
- (2) Revegetation is planned to return area to a natural state if abandoned. Additional vegetation, such as trees, if area goes into production.
- (3) Pits will be reclaimed as soon as is practical after operations cease if to be abandoned, or, in conjunction with production construction. In either case, reclaimed in a manner described in Section 7 (1), (2), (3).
- (4) Oil to be disposed of in manner described in Section 7 (3).
- (5) Rehabilitation will commence at the time of rig demobilization if hole non-productive and should take no longer than 5 days. If hole to be produced, rehabilitation will be handled with and immediately following production construction.

Checksheet NTL-6
Cole #1

11. Other Information

- (1) The outstanding topographic features are cliffs, platforms, canyons, and low rolling hills of sandstone and shale produced by erosion of gently dipping slopes, sparse, spasmodic rainfall and scant vegetation ranging from sagebrush to some Juniper-Pinion. Fauna is typical San Rafael dessert wildlife.
- (2) BLM ownership with grazing the only other surface use.
- (3) Water in the area would be several earthen tanks: one, $\frac{1}{2}$ mile NE of location; one, $\frac{1}{16}$ mile South; 2 others, 1 mile and $1\frac{1}{4}$ miles NE. Drought Relief Reservoir $1\frac{1}{2}$ miles North. Huntington and Ferron Creeks 8 miles West. San Rafael River 5 miles South. The nearest occupied dwelling would be in the Castledale area 14 miles West. There are some Indian Petroglyphs approximately $3\frac{1}{2}$ miles SE, Sec. 32, T19S, R11E. No other such sites, historical or cultural, are known in the area.

12. Lessee's or operator's representative

Michael A. Cole
P. O. Box 666
Price, Utah 84501 Telephone: 801/637-5322

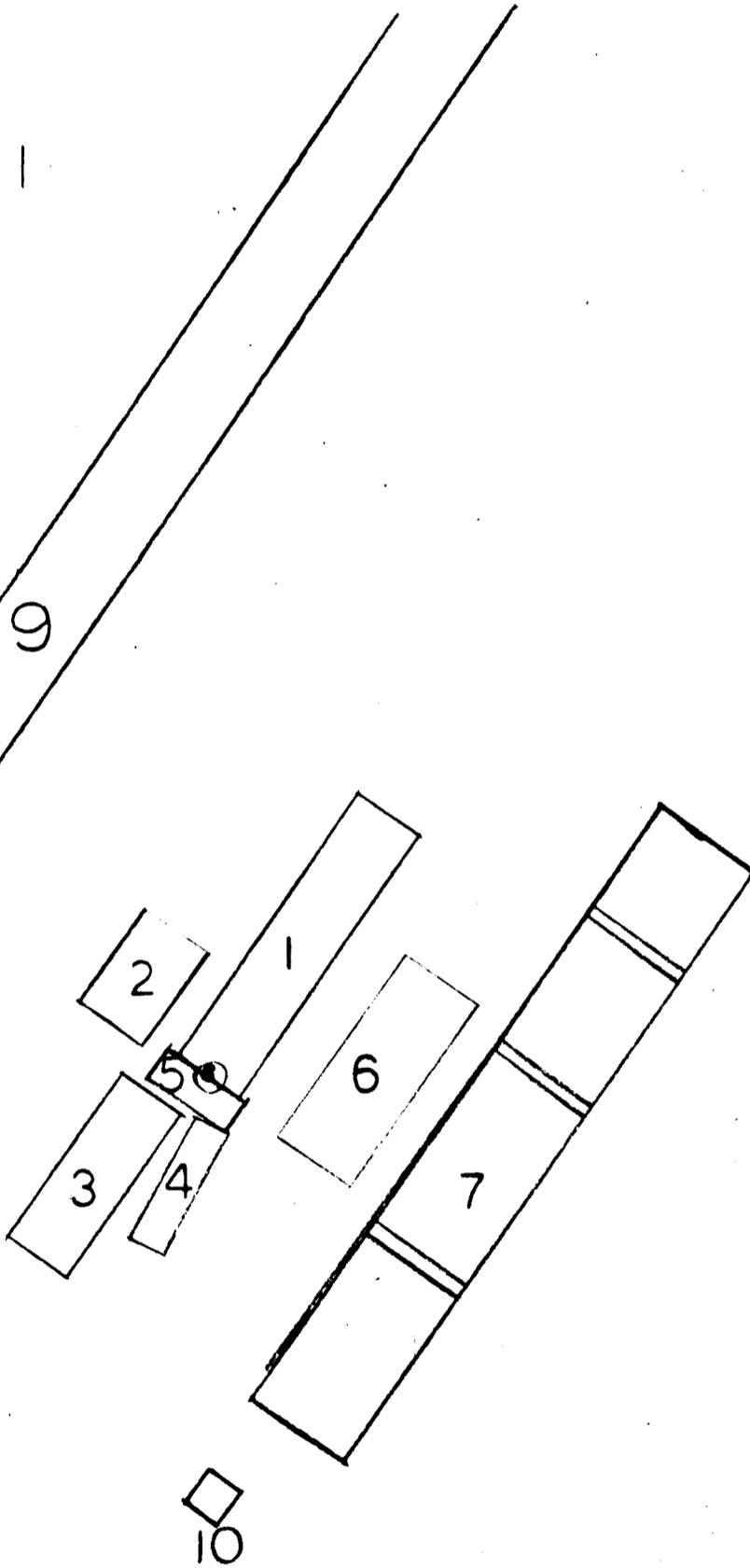
13. Certification

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

November 30, 1977
Date

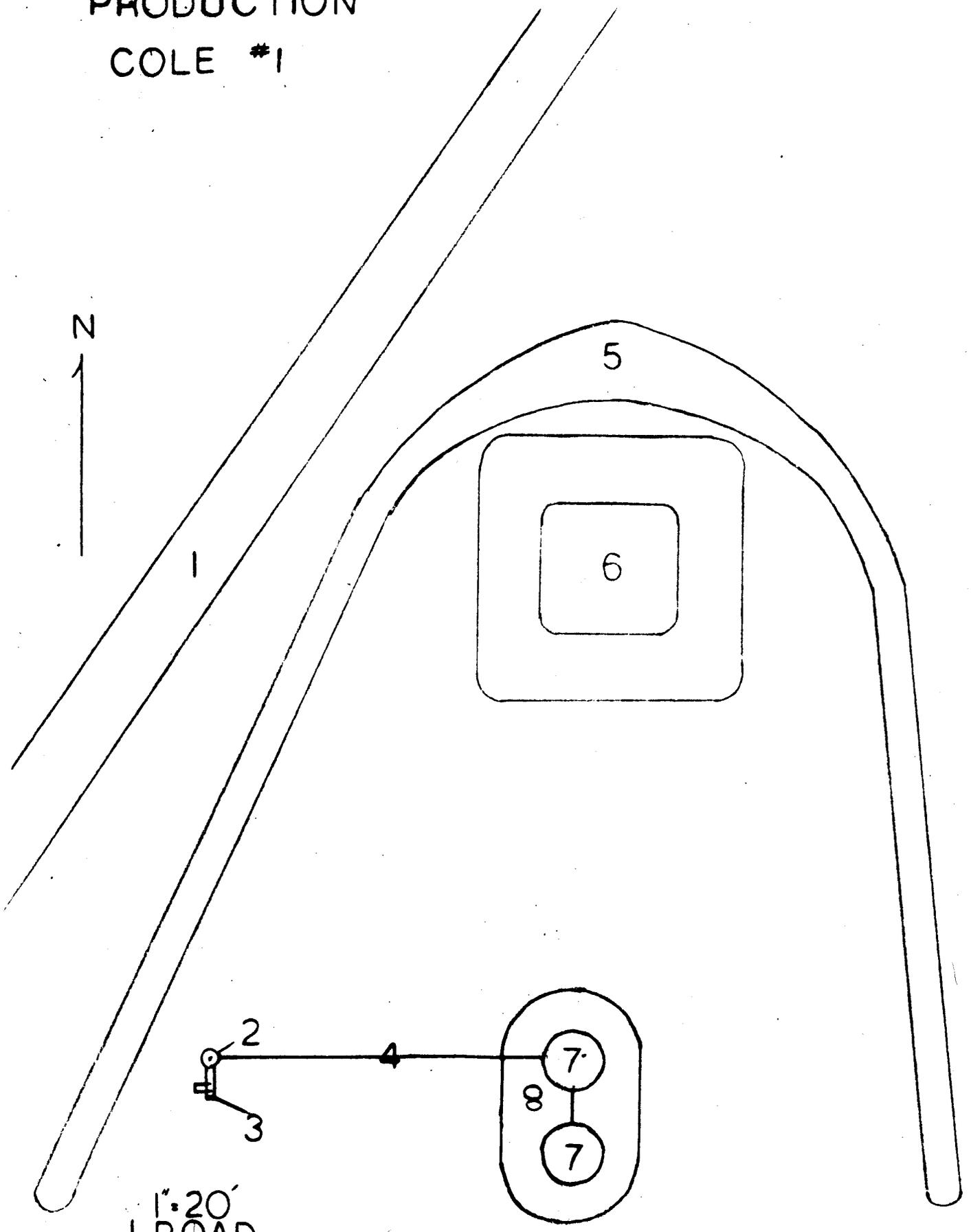
Michael A. Cole Lessee's
Name and Title Representative

LOCATION
COLE # 1



- 1" = 20'
- 1 RIG
 - 2 DOGHOUSE
 - 3 PIPE TRLR.
 - 4 PIPE BASKET
 - 5 FLOOR
 - 6 MUD TANK
 - 7 MUD PIT
 - 8 HOLE 10
 - 9 ROAD BURN PI.

PRODUCTION
COLE #1



- 1 ROAD
- 2 HOLE
- 3 PUMP
- 4 FLOW LINES
- 5 DIKE
- 6 SUMP
- 7 TANKS
- 8 MOUND

U.S. GEOLOGICAL SURVEY, CONSERVATION DIVISION

FROM: DISTRICT GEOLOGIST, SALT LAKE CITY, UTAH

TO: DISTRICT ENGINEER, SALT LAKE CITY, UTAH

Well	Location	Lease No.
NYAL G. COLE COLE #1	NW $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ SEC. 23, T.19S, R.10E SLM EMERY COUNTY, UTAH G.H. EL. 5691	U-33967
<p>1. Stratigraphy and Potential Oil and Gas Horizons. The surface rocks are Carmel (Jurassic). The Carmel Formation is part of the San Rafael Group. All potential oil and gas sands will be tested to a proposed depth of 2500 feet. William G. Bush No. 1 (G.H. EL. 5685') same section, reported the following tops: Surface-Carmel, Navaho 180'; Kayenta 610'; Wingate 735'; Chinle 1175'; Moenkopi 1457'; T.D-1578'. P & A.</p> <p>2. Fresh Water Sands. Navaho and Wingate Sandstones could contain usable water. No water sands were reported in well of item 1.</p> <p>3. Other Mineral Bearing Formations. (Coal, Oil Shale, Potash, Etc.) None</p> <p>4. Possible Lost Circulation Zones. Unknown</p> <p>5. Other Horizons Which May Need Special Mud, Casing, or Cementing Programs. Protect any fresh/usable aquifers penetrated.</p> <p>6. Possible Abnormal Pressure Zones and Temperature Gradients. Unknown.</p> <p>7. Competency of Beds at Proposed Casing Setting Points. Probably adequate.</p> <p>8. Additional Logs or Samples Needed. None.</p> <p>9. References and Remarks. Reimote from KGS. U.S.G.S. BULL. 806.</p>		
Date: DEC 2 - 1977		Signed: R.E.G.

LEASE U-33967 DATE Dec 16, 77

WELL NO. Cole #1

LOCATION: NW 1/4 SE 1/4, SEC. 23, T. 19S, R. 10E

FIELD Wildcat COUNTY Emery STATE Ut

ENVIRONMENTAL IMPACT ANALYSIS - ATTACHMENT 2-B

I. PROPOSED ACTION

Nyul G. Cole PROPOSES TO DRILL AN OIL AND
(COMPANY)
GAS TEST WELL WITH ROTARY TOOLS TO ABOUT 2500 FT. TD. 2) TO CONSTRUCT A ^{USE EXISTING}
DRILL PAD 150 FT. X 400 FT. AND A RESERVE PIT ^(12' X 160') 40 FT. X 50 FT.
3) TO CONSTRUCT ~~NO~~ FT. WIDE X MILES ACCESS ROAD AND UPGRADE
FT. WIDE X MILES ACCESS ROAD FROM AN EXISTING AND IMPROVED ROAD. TO CONSTRUCT

GAS OIL PRODUCTION FACILITIES ON THE DISTURBED AREA FOR THE DRILL PAD
AND TRUCK TRANSPORT THE PRODUCTION THROUGH A PIPELINE TO A TIE-IN IN
SECTION , T. , R.
NOT KNOWN AT THIS TIME

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

(1) TOPOGRAPHY: ROLLING HILLS DISSECTED TOPOGRAPHY DESERT
OR PLAINS STEEP CANYON SIDES NARROW CANYON FLOORS DEEP DRAINAGE
IN AREA SURFACE WATER site is existing drill pad for Bush #1
in process of being abandoned. Well site is on gentle slope.

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

Rehab of entire 150' x 400' disturbed area should
be stip as old site has not been revegetated, old operator
should be relieved of responsibility.

(3) WILDLIFE: DEER ANTELOPE ELK BEAR SMALL
MAMMAL BIRDS ENDANGERED SPECIES OTHER NO KNOWN ENDANGERED
Species

(4) LAND USE: RECREATION LIVESTOCK GRAZING AGRICULTURE
 MINING INDUSTRIAL RESIDENTIAL OIL & GAS OPERATIONS
Some uranium test drilling in AREA. One test hole
was drilled on site and hit oil some oil stains on surface.

REF: BLM UMBRELLA EAR
USFS EAR
OTHER ENVIRONMENTAL ANALYSIS

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

- 1) EXHAUST EMISSIONS FROM THE DRILLING RIG POWER UNITS AND SUPPORT TRAFFIC ENGINES WOULD ADD MINOR POLLUTION TO THE ATMOSPHERE IN THE LOCAL VICINITY.
- 2) MINOR INDUCED AND ACCELERATED EROSION POTENTIAL DUE TO SURFACE DISTURBANCE AND SUPPORT TRAFFIC USE.
- 3) MINOR VISUAL IMPACTS FOR A SHORT TERM DUE TO OPERATIONAL EQUIPMENT AND SURFACE DISTURBANCE.
- 4) TEMPORARY DISTURBANCE OF WILDLIFE AND LIVESTOCK.
- 5) MINOR DISTRACTION FROM AESTHETICS FOR SHORT TERM.
- 6)

4. Alternatives to the Proposed Action

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

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

2A) Need to complete P&A of Bush #1 as new hole 35' 10" NNE of old well.

3) LOCATION WAS MOVED 35' 10" NNE from old well site - (34' N Calc' TO AVOID 6' E)

LARGE SIDEHILL CUTS NATURAL DRAINAGE OTHER Road way - 50' safety margin. # old well -

4) State of well site destroyed by recent rehab of drill site, only reference is old well - Footages safe from existing bush well.

5) operator wished to rotated drill pad 180° -

5. Adverse Environmental Effects Which Cannot Be Avoided

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

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

3) MINOR AND TEMPORARY DISTURBANCE OF WILDLIFE.

4) TEMPORARY DISTURBANCE OF LIVESTOCK.

5) MINOR AND SHORT-TERM VISUAL IMPACTS.

6)

6. DETERMINATION:

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

DATE INSPECTED Dec 16, 77

INSPECTOR J. EVANS

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

The State of Utah
Natural Resources Department
Oil, Gas and Mining Division

November 30, 1977

Request for Unorthodox Location Exemption

We would like for an exception to be granted to us on Rule C-3 (General Well Spacing Requirements). Specifically the 500 foot spacing "from any property or lease line or from the boundary of any legal subdivision comprising a governmental quarter-quarter section or equivalent lot or lots of comparable size and location."

This request for an unorthodox location is based on geological conditions. We wish to drill close to an abandoned uranium exploration hole which produced a definite show of oil.

In addition, the lease on which we propose to drill includes a 660 foot radius from the proposed location.

Thank you.



Nyal G. Cole

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

** FILE NOTATIONS **

Date: December 2, 1977
Operator: Nyal G. Cole
Well No: Cole - Federal #1
Location: Sec. 23 T. 19S R. 10E County: Emery

File Prepared: Entered on N.I.D.:
Card Indexed: Completion Sheet:

API NUMBER: 43-015-30056

CHECKED BY:

Administrative Assistant AW
Remarks:
Petroleum Engineer _____
Remarks:
Director _____
Remarks:

Disapproved
70' south of previously approved Bush #2 - OK -
(Bush lease terminated)
Letter of Disapproval written.
12/27/77

INCLUDE WITHIN APPROVAL LETTER:

Bond Required: Survey Plat Required:
Order No. Surface Casing Change to

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

O.K. Rule C-3 O.K. In _____ Unit
Other:

Letter Written/Approved

December 2, 1977

Mr. Nyal G. Cole
P. O. Box 666
Price, Utah 84501

Re: Cole-Federal #1
Sec. 23, T. 19S, R. 10E, NW NW SE,
Emery County, Utah

Dear Mr. Cole:

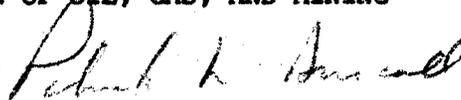
In reference to your application for a permit to drill the above well, I wish to advise you that this Division cannot approve the application for the following reason.

A prior approval for a permit has been issued to Mr. William Bush for a well described as the Bush-Federal #2 located 3100 feet south of the north line and 2865 feet east of the west line. This is nearly identical to the well for which you have applied for.

It will be necessary for Mr. Bush to request termination of his application, or to indicate to this office that you are now the legal lessee of this land so that we may cancel out Mr. Bush's prior application.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING



PATRICK L. DRISCOLL
CHIEF PETROLEUM ENGINEER

PLD/ko

cc: U.S.G.S.
Well File-OG&M

December 20, 1977

Nyal G. Cole
P.O. Box 666
Price, Utah 84501

Re: Well No. Cole-Federal #1
Sec. 23, T. 19 S, R. 10 E,
Emery County, Utah

Gentlemen:

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

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

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

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

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

The API number assigned to this well is 43-015-30056.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

CLEON B. FEIGHT
Director

cc: U.S. Geological Survey

August 7, 1978

Nyal G. Cole
PO Box 666
Price, Utah 84501

Re: Well No. Cole #1
Sec. 23, T. 19S, R. 10E
Emery County, Utah
December 1977-June 1978

Gentlemen:

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

Rule C-22, General Rules and Regulations and Rules of Practice and Procedure, requires that said reports be filed on or before the sixteenth (16) day of the succeeding month. This report may be filed on Form OGC-1b, (U.S. Geological Survey Form 9-331) "Sundry Notices and Reports of Wells", or on company forms containing substantially the same information. We are enclosing forms for your convenience.

Your prompt attention to the above will be greatly appreciated.

Very truly yours,

DIVISION OF OIL, GAS, & MINING

Tammy Edge
Typist

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

5. LEASE DESIGNATION AND SERIAL NO.

U-33967

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

N/A

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.)

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

9. WELL NO.

10. FIELD AND POOL OR SUBCAT

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

Sec. 23, T19S, R10E

12. COUNTY OR PARISH 13. STATE

Emery Utah

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR

Nyal G. Cole

3. ADDRESS OF OPERATOR

P. O. Box 666, Price, Utah 84501

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

At surface 2998 feet South and 2874 feet East from the NW Corner of Sec. 23, T19S, R10E, S.L.B. & M

14. PERMIT NO.

43-015-30056

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

5,691 GL

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other) No activity

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other) No activity

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

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

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.)

No activity - December, 1977 to June 1978

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

SIGNED

Nyal G. Cole

TITLE

DATE

8-9-78

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

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

July, 1978, Report

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
Nyal G. Cole

3. ADDRESS OF OPERATOR
P. O. Box 666, Price, Utah 84501

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface 2998 feet South and 2873 feet East from the NW Corner of Sec. 23, T19S, R10E, S.L.B. & M.

14. PERMIT NO. 43-015-30056

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
5,691 GL

5. LEASE DESIGNATION AND SERIAL NO.
U-33967

6. IF INDIAN, ALIQUOT OR TRIBE NAME

7. U.S. AGENCY NAME
U.S. GEOLOGICAL SURVEY

8. FIELD OR SHARE NAME
Wildcat

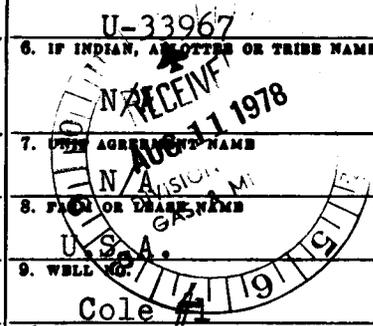
9. WELL NO.
Cole #

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR B.L. AND SURVEY OR AREA
Sec. 23, T19S, R10E

12. COUNTY OR PARISH
Emery

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) <input type="checkbox"/>

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

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

Drilled hole to 1452', cored to 1467', sandy siltstone, carbonaceous stringers, no show.

Show at 1285', cored to 1292', fractured oil sand 1285' - 1286.5. Core analyzed by Core Lab, Farmington, N. Mex. Sample examination with black light showed show beginning 1260-70, sample interval very good 1280-85 E log - compensated neutron gamma and density show potential 1279-1286.5.

All tests lead us to believe fractured condition of oil sand and little or no gas charge would not be ~~not~~ produced by cementing tubing and perforating, but rather open hole with packer in tubing set at 1272'. Further, the show sands that hole should be plugged back in order to best test oil sands 1279 - 1286.5.

Verbal permission given by Bill Martins, U.S.G.S., Salt Lake City to change plans 8-4-78.

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

SIGNED Nyal G. Cole TITLE _____ DATE 8-9-78

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

August 31, 1978

MEMO TO FILE

Re: Nyal G. Cole
Well No. U.S.A. Cole #1
NW SE
Sec. 23, T. 19S, R. 10E
Emery County, Utah

On August 31, 1978 N.G. Cole requested permission to plug and abandon the above well.

The Pertinent information is as follows:

T.D. - 1,467'
PBD - 1,294'

100' plug 1,200 - 1,294'
100' plug 47 - 147'

A 10 sack plug will be set at surface and a reg. dry hole marker will be erected.

This program was approved by the U.S. Geological Survey and so by our office.

CLEON B. FEIGHT
DIRECTOR
DIVISION OF OIL, GAS, & MINING

CBF/lw
cc:U.S.G.S.



SCOTT M. MATHESON
Governor

OIL, GAS, AND MINING BOARD

GORDON E. HARMSTON
Executive Director,
NATURAL RESOURCES

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES

I. DANIEL STEWART
Chairman

CLEON B. FEIGHT
Director

DIVISION OF OIL, GAS, AND MINING

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

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

May 25, 1979

Nyal G. Cole
P. O. Box 666
Price, Utah 84501

Re: Well No. Cole-Federal #1
Sec. 23, T. 19S, R. 10E,
Emery County, Utah

Gentlemen:

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

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

Thank you for your cooperation relative to the above.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

KATHY OSTLER
RECORDS CLERK



SCOTT M. MATHESON
Governor

OIL, GAS, AND MINING BOARD

GORDON E. HARMSTON
Executive Director,
NATURAL RESOURCES

STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS, AND MINING

CLEON B. FEIGHT
Director

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

CHARLES R. HENDERSON
Chairman

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

November 19, 1979

Nyal G. Cole →
P. O. Box 666
Price Utah 84501

RE: Well No. Cole-Federal #1
Sec. 23, T. 19S, R. 10E,
Emery County, Utah
SECOND NOTICE.

Gentlemen:

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

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

Thank you for your cooperation relative to the above.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

Debbie Beauregard
DEBBIE BEAUREGARD
CLERK-TYPIST

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPlicate
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

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
Nyal G. Cole 637-5322

3. ADDRESS OF OPERATOR
P.O. Box 666, Price, Utah 84501

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)
At surface 2998 feet South and ²³⁷¹~~2874~~ feet East from the NW corner of Sec. 23, T19S, R10E, SLBM.

14. PERMIT NO. **None Given**

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
5,691 GL

6. LEASE DESIGNATION AND SERIAL NO.
U 33967

6. IF INDIAN, ALIQUOT OR TRIBE NAME
N/A

7. UNIT AGREEMENT NAME
N/A

8. FARM OR LEASE NAME
USA

9. WELL NO.
Cole # 1

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 23, T19S, R10E

12. COUNTY OR PARISH
Emery

18. 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 checked="" type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input checked="" type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	(Other) <input type="checkbox"/>

(NOTE: Report results of multiple completion on Well Completion or Recombination 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.)

Swabbed and bailed from sands 1279-1286.5 with no results. Called for verbal permission to P/A. 15 sacks mix 1 to 1 mix placed 1294-1200 and 15 sacks 1 to 1 mix placed 147-47. 10 sacks 1 to 1 mix on top w/4 1/2" marker 10' long 4' above ground level. Permission given to Mr. Martins 8-31-78.

APPROVED BY THE DIVISION OF OIL, GAS, AND MINING

DATE: 3-27-81

BY: M. J. Minder

RECEIVED

MAR 30 1981

DIVISION OF OIL, GAS & MINING

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

SIGNED Michael A. Cole TITLE Agent DATE 9/3/78

(This space for Federal or State office use)

APPROVED BY Frank S. Boyd TITLE Acting DISTRICT ENGINEER DATE 9/20/78

CONDITIONS OF APPROVAL, IF ANY:
See attached oral approval of 8/31/78

*See Instructions on Reverse Side

Operator

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE

(See instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.6

10

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

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

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

2. NAME OF OPERATOR
Nyal G. Cole

3. ADDRESS OF OPERATOR
P.O. Box 666, Price, UT 84501

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface 2998 feet South and 2871 feet East from the NW Corner of Sec. 23, T19S, R10E, SLBM.
At top prod. interval reported below
At total depth

43-015-30056

14. PERMIT NO. None Given DATE ISSUED 12-2-77

5. LEASE DESIGNATION AND SERIAL NO.
U-33967

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
USA

9. WELL NO.
Cole #1

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA
Sec. 23, T19S, R10E

12. COUNTY OR PARISH
Emery

13. STATE
Utah

15. DATE SPUNDED 7/7/78 16. DATE T.D. REACHED 7/28/78 17. DATE COMPL. (Ready to prod.) P & A 9/2/78 18. ELEVATIONS (DF, REB, RT, GR, ETC.)* 5,691 GL 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD 1467 - 4224 21. PLUG, BACK T.D., MD & TVD 1294 - 4397 22. IF MULTIPLE COMPL., HOW MANY* N/A 23. INTERVALS DRILLED BY → ROTARY TOOLS 0 - 1467 CABLE TOOLS N/A

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

26. TYPE ELECTRIC AND OTHER LOGS RUN Gamma, Compensated Neutron, Formation Density, Caliper 27. WAS WELL CORED Yes

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
23# 7"	23	91'	8 1/2"	15 sx 1:1 circ.	None
2-7/8"	6"	1279	6"	Lynes Packer	1279

29. LINER RECORD 30. TUBING RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
	N/A				2-7/8		1279

31. PERFORATION RECORD (Interval, size and number) 32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
N/A	

33.* PRODUCTION

DATE FIRST PRODUCTION N/A PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) WELL STATUS (Producing or shut-in)

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
			→				
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
		→					

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

35. LIST OF ATTACHMENTS
Copies of E Log, Core Lab Report, and P & A Reports

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

SIGNED _____ TITLE Representative DATE 3/4/81

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

INSTRUCTIONS

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

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric; etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

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

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

Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	MEAS. DEPTH	TRUE VERT. DEPTH
Moenkopi Cored Sec.	1285	1292	See Core Lab Report			
38. GEOLOGIC MARKERS						

CORE ANALYSIS RESULTS FOR

CXM DRILLING COMPANY (Nyal Cole)

COLE NO. 1

WILDCAT

EMERY COUNTY, UTAH

CORE LABORATORIES, INC.

Petroleum Reservoir Engineering

DALLAS, TEXAS

Company CXM DRILLING COMPANY Formation MOENKOPI Page 1 of 1
 Well COLE NO. 1 Cores 2 1/8 CONV. File RP-3-2867
 Field WILDCAT Drilling Fluid WATER BASE MUD Date Report 7-30-78
 County EMERY State UTAH Elevation 5400 EST. GR Analysts ET
 Location SEC. 23-T19N-R10E Remarks _____

CORE ANALYSIS RESULTS

(Figures in parentheses refer to footnote remarks)

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYs		POROSITY PERCENT	RESIDUAL SATURATION		PROBABLE PRODUCTION	REMARKS
		HORIZONTAL	VERTICAL		OIL % VOLUME % PORE	TOTAL WATER % PORE		
1	1285-85.5	5.9		12.2	1.6	67.2		Sd, Lt Gy FG Sl/Dolo
	1285.5		6.4					
2	1285.5-86	7.0		14.7	10.2	55.1		Sd, Lt Gy FG Sl/Dolo Vert Frac
	1286-92							SHALE NO ANALYSIS

NOTE:

(*) REFER TO ATTACHED LETTER.

(1) INCOMPLETE CORE RECOVERY—INTERPRETATION RESERVED.

(2) OFF LOCATION ANALYSES—NO INTERPRETATION OF RESULTS

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc., and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operation, or profitableness of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.



CORE LABORATORIES, INC.

Petroleum Reservoir Engineering

COMPANY CXM DRILLING COMPANY FIELD WILDCAT FILE RP-3-2867
 WELL COLE NO. 1 COUNTY EMERY DATE JULY 30, 1978
 LOCATION SEC 23 T19N R10E STATE UTAH ELEV. 5400 EST GR

CORE-GAMMA CORRELATION

These analyses, opinions or interpretations are based on observations and material supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted). But Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations as to the productivity, proper operation, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

VERTICAL SCALE: 5" = 100'

CORE-GAMMA SURFACE LOG (PATENT APPLIED FOR)

GAMMA RAY
RADIATION INCREASE
→

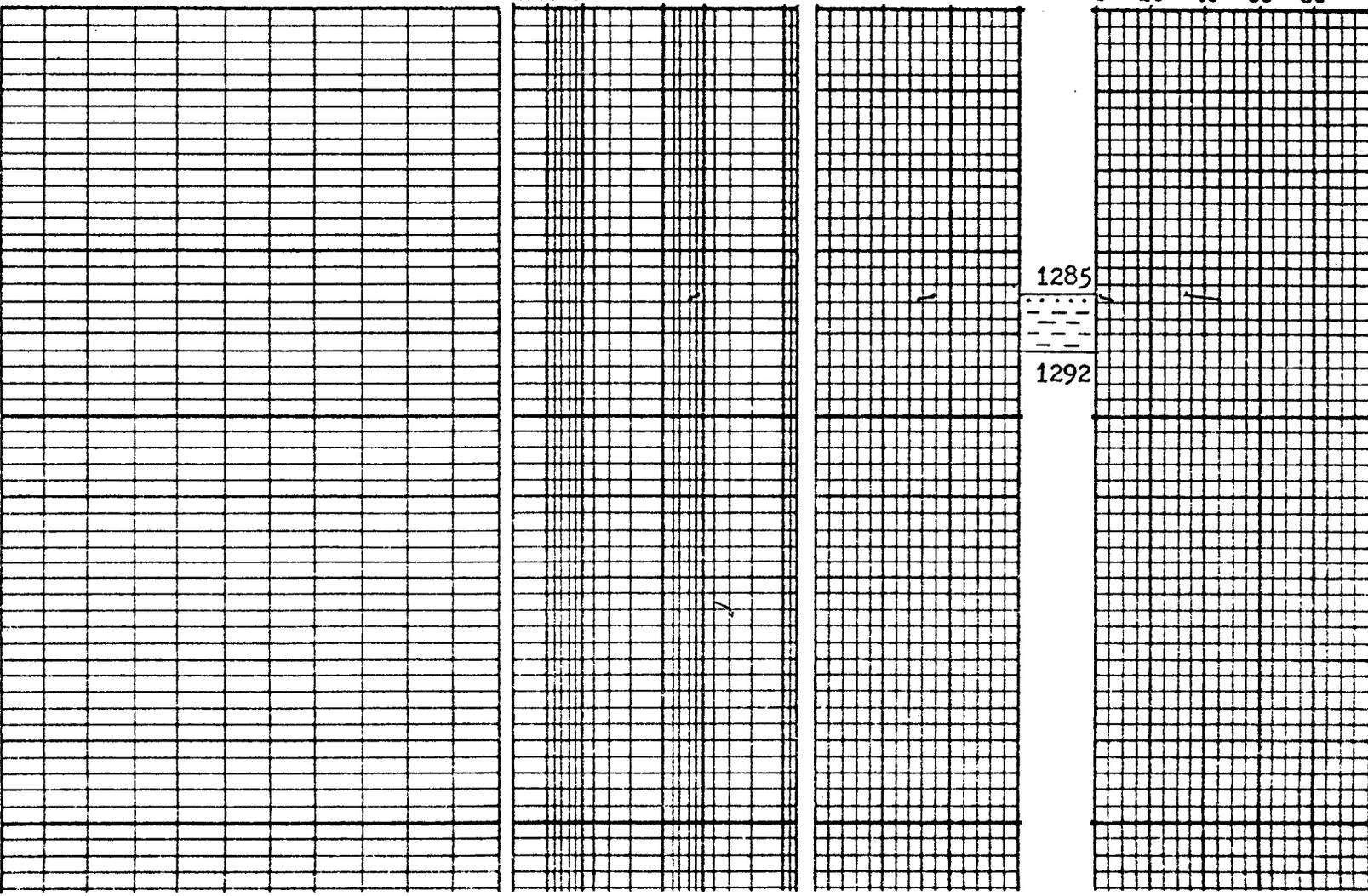
COREGRAPH

TOTAL WATER ———
 PERCENT TOTAL WATER
 80 60 40 20 0

PERMEABILITY ———
 MILLIDARCYs
 100 50 10 5 1

POROSITY ———
 PERCENT
 20 10

OIL SATURATION -----
 PERCENT PORE SPACE
 0 20 40 60 80



CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

CUTTINGS, POROSITY, & HYDROCARBON ANALYSIS

FOR

CXM DRILLING COMPANY

COLE NO. 1
WILDCAT FIELD
EMERY COUNTY, UTAH

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

CXM DRILLING COMPANY
COLE NO. 1
WILDCAT FIELD
EMERY COUNTY, UTAH

DATE: 8/7/78
FORMATION:
DRLG. FLUID:
LOCATION:

FILE NO: 2208-434
ANALYST: CASEY
LABORATORY: CARRIZO SPRINGS
CORES: CUTTINGS

CUTTINGS, POROSITY, & HYDROCARBON ANALYSIS

<u>SMP</u> <u>NO.</u>	<u>DEPTH</u>	<u>POR</u> <u>%</u>	<u>OIL%</u> <u>PORE</u>
1	1260-70	5.7	0.0
2	1270-80	12.8	0.9
3	1280-85	12.2	1.0
4	1280-85	14.3	0.8
5	1280-85	14.2	0.9

CORE LABORATORIES, INC.



Petroleum Reservoir Engineering

COMPANY CXM DRILLING COMPANY FILE NO. 2208-434
 WELL COLE NO. 1 DATE 8-7-78 ENGRS. _____
 FIELD WILDCAT FORMATION _____ ELEV. _____
 COUNTY EMERGY STATE TEXAS DRLG. FLD. _____ CORES _____
 LOCATION _____ REMARKS _____

CUTTINGS POROSITY & HYDROCARBON ANALYSIS

These analyses, opinions or interpretations are based on observations and material supplied by the client to whom, and for whose exclusive and confidential use this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories International S.A. (all errors or omissions excepted), but Core Laboratories International S.A. and its officers and employees, assume no responsibility and make no warranty or representations as to the productivity, proper operation, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

No.	DEPTH	POROSITY					OIL SATURATION...				FLU...	LITHOLOGY	DESCRIPTION	
		%					% PORE SPACE				Tr PFG			
		15	12	9	6	3	0	20	40	60	80			
1	1260-70													40% SD FG SLTY SLMY NO FLU 30% SH RD SSLTY SLMY NO FLU 30% SH GRN NO FLU
2	1270-80													40% SD FG SLTY SLMY MICA TR FLU 20% SD RD SSLTY SLMY TR FLU 40% SH GRN PYR TR FLU
3	1280-85													60% SD FG SLTY SLMY MICA TR FLU 10% SH RD SSLTY SLMY TR FLU 30% SH GRN TR FLU
4	1280-85													70% SD FG SLTY SLMY MICA TR FLU 10% SH RD SSLTY SLMY TR FLU 20% SH GRN PYR TR FLU
5	1280-85													70% SD FG SLTY SLMY MICA TR FLU 10% SD RD SSLTY SLMY TR FLU 20% SH GRN TR FLU

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

CXM DRILLING COMPANY
COLE NO. 1

DATE: 8/7/78
WILDCAT FIELD

FILE NO: 2208-434
EMERY COUNTY, TEXAS

DISTRIBUTION OF FINAL REPORT

COPIES TO:

6 CC CXM DRILLING COMPANY
P.O. BOX 666
PRICE, UTAH 84501
ATTN: MR. MIKE COLE

