

FILE NOTATIONS

Entered in NID File ..✓.....
Location Map Pinned
Card Indexed ..✓.....

Checked by Chief *.....
Approval Letter
Disapproval Letter

COMPLETION DATA:

Date Well Completed **8-19-78**
W..... WW..... TA.....
GW..... OS..... PA.✓.....

Location Inspected
Bond released
State or Fee Land

LOGS FILED

Driller's Log..... *Not required - rig skid*
Electric Logs (No.)
E..... I..... Dual I Lat..... GR-N..... Micro.....
BHC Sonic GR..... Lat..... MI-L..... Sonic.....
CBLLog..... CCLog..... Others.....

*(Plugged 8-19-78)
Unsuccessful hole - Rig skidded to
Cisco Fed. 2-A*

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

(Other instructions on reverse side)

Budget Bureau No. 42-R1425.

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

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

2. NAME OF OPERATOR
DYCO PETROLEUM CORPORATION

3. ADDRESS OF OPERATOR
420 NBT Bldg., 320 S. Boston, Tulsa, Oklahoma 74103

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
 At surface
 2050' FN & 1890' FE
 At proposed prod. zone N/A

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
18.8 N-NW of Cisco, Utah

10. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 1890'

16. NO. OF ACRES IN LEASE
 120

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. 1320' - south

19. PROPOSED DEPTH
 3500

20. ROTARY OR CABLE TOOLS
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 5484' Ground

22. APPROX. DATE WORK WILL START*
 July 10, 1978

5. LEASE DESIGNATION AND SERIAL NO.
U-38359
 6. IF INDIAN, ALLOTTEE OR TRIBE NAME

 7. UNIT AGREEMENT NAME

 8. FARM OR LEASE NAME
Cisco - Federal
 9. WELL NO.
2
 10. FIELD AND POOL, OR WILDCAT
CISCO DOME
 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec 10 T20S R21E
 12. COUNTY OR PARISH 13. STATE
Grand Utah

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 $\frac{1}{4}$ "	8-5/8"	24	350	To surface
4 $\frac{1}{2}$ "	4 $\frac{1}{2}$ "	10.5	3500	Across pay

1. Drill 12 $\frac{1}{4}$ " hole to - 350', set 8-5/8" csg, cement to surface.
2. Drill 7-7/8" hole to 3500'.
3. Run 4 $\frac{1}{2}$ " csg if productive.
4. P&A per U. S. G. S. instructions if dry hole.

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 Charles L. Linn TITLE Area Engineer DATE 4-25-78
 (This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

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

*See Instructions On Reverse Side

DRILLING PLAN

1. SURFACE FORMATION

A. Mancos

2. GEOLOGICAL TOPS

A. Dakota	3200	oil
B. Cedar Mountain	3300	oil or gas
C. Morrison	3400	gas
D. Salt Wash	3600	gas
E. T.D.	3800	

3. DEPTHS OF ANTICIPATED OIL, WATER OR GAS

A. See above

4. CASING PROGRAM

- A. Surface: set 350' 8-5/8" 24# K-55 ST&C new casing & cement to surface with 250 sks Class "G".
- B. Production: set 4½" 10.5# K-55 ST&C @ TD. Cement across pay zones.

5. PRESSURE CONTROL EQUIPMENT

- A. Double ram 10" - 900 Series B. O. P. w/2" kill line, and 2" manifold to pit & mud tanks.
- B. B. O. P. to be tested to 1000 psi prior to drilling out shoe jt, then pipe rams operational tested daily, blind rams to be operational tested on trips. B. O. P. stack & manifold to be visually inspected daily. See Attachment.

6. DRILLING FLUID PROGRAM

- A. 0 - 350 - water, with gel & lime if necessary.
- B. 350 - TD - chemical gel mud to top Dakota: 8.7 - 8.9 wt, 34 - 38 vis., 20 cc water loss. On top Dakota increase vis to 38 - 44, lower water loss to 10 - 15 cc to drill to TD.
Lost circulation material to be on location.

7. AUXILIARY EQUIPMENT

- A. Upper Kelly Cock
- B. Float @ bit
- C. Mud system will be visually monitored
- D. Stabbing valve on floor
- E. Hole to be kept full on trips

8. EVALUATION PROGRAM

- A. Cores - None planned
- B. DST - Across Dakota if deemed advisable
- C. Logs - Dual Induction TD - base surface
CNL - Density TD - base surface
Sonic TD - base surface

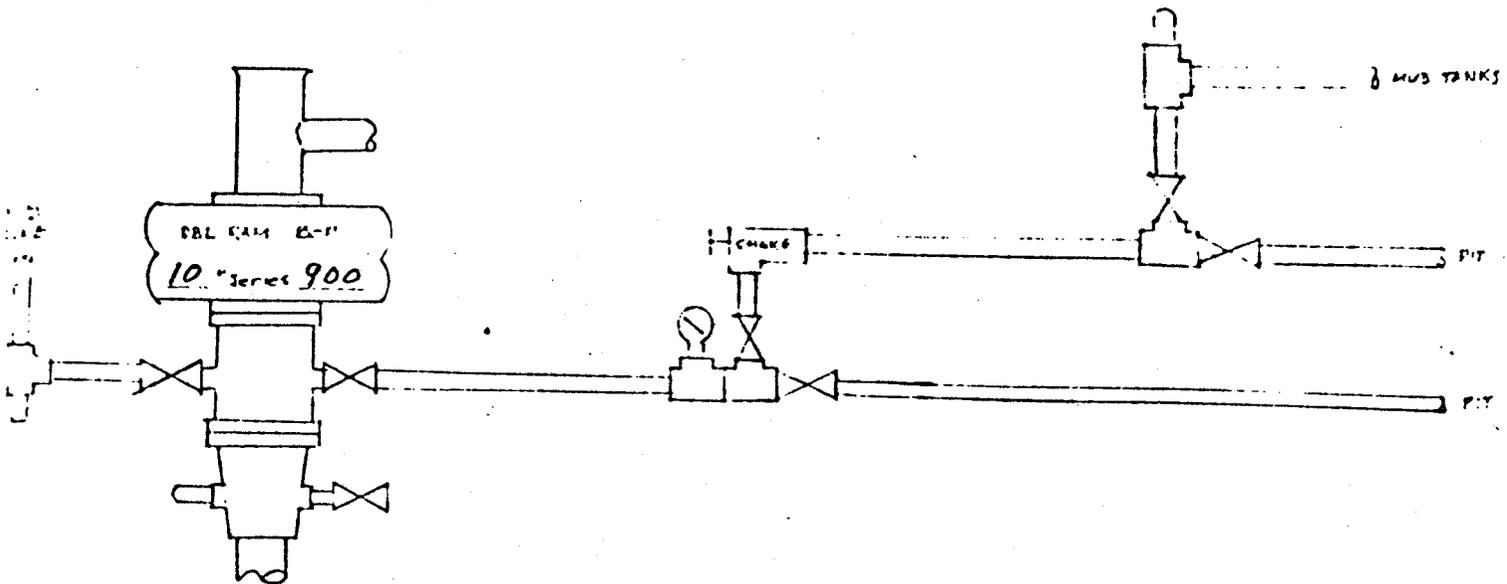
9. HAZARDS

- A. No abnormal pressures or temperatures are anticipated in this area. No H₂S is anticipated. Possible lost circulation if mud weight gets too high will have lost circulation material on location.

10. DATES

- A. No definite date on rig availability at the moment. Estimate will start first part of July. Drilling operation should take about ten days. If completion rig is available immediately after drilling, 5 days for rig move, location cleanup, and move in completion rig. Completion time estimate at 15 days, additional 15 day to set production equipment.

Typical Minimum BOP Specs



Auxiliary Equipment and Notes

1. All lines and valves to be minimum 2"/3000 psi WP.
2. All bolts to be installed and tight.
3. All crew members to be trained in and familiar with BOP equipment, accumulators, and procedures.
4. Hole to be kept full at all times.
5. ~~to be on the floor at all times.~~
6. An inside BOP to be on the floor at all times.
7. An upper kelly-cock to be used at all times.
8. (a) After nipping up, preventers will be pressure tested at 1000 psi for 15 minutes before drilling out.
(b) BOP will be inspected and operated at least daily to insure good working order.
(c) All pressure and operating tests will be recorded on daily drilling report.

EXHIBIT "D"

MULTI-POINT REQUIREMENTS TO ACCOMPANY A. P. D.

1. EXISTING ROADS - a legible map showing:

- A. Proposed well site as staked.
(The proposed well site and elevation plat is shown)

See attached survey plat - Exhibit I.

- B. Route and distance from nearest town or locatable reference point to where well access route leaves main road.
The nearest town is Cisco, Utah. From Cisco go southwest along #128 3.6 miles to Windy Mesa Road, thence northwest 11.9 miles to corrals and gate, thence northwest 1.2 miles to junction of roads NE NW, thence right along road N-NW 0.5 mile to junction of roads, thence right 1.5 miles N-NW along road to proposed access road which is less than 0.1 mile long, to location in SW NE Sec. 10 T20S R21E. Also see Access Road Map.

- C. Access road (s) to location color-coded or labeled.

See Access Road Map - Exhibit II, 1, 2, & 3.

Red - Paved

Green - Gravel

Yellow - Trail

Orange - New Road

- D. If exploratory well, all existing roads within a 3-mile radius (including type of surface, conditions, etc.)

N/A

- E. If development well, all existing roads within a 1-mile radius of well site.

See Access Road Map - Exhibit II, page 1.

- F. Plans for improvement and/or maintenance of existing roads.

No improvements are anticipated for the existing road. Maintenance will be done as needed to ensure safe vehicular and machinery traffic flow.

2. PLANNED ACCESS ROADS:

Map showing all necessary access roads to be constructed or reconstructed, showing: See Exhibit II, page 1, orange road.

(1) Width:

Roads will be 18 feet to allow two way traffic.

(2) Maximum grade: Average grade will be 3%, but maximum will not exceed 8%.

(3) Turnouts: No new turnouts are anticipated.

(4) Drainage design: Water bars will be provided on the new road to guarantee drainage off location and to conform to natural drainage.

(5) Location and size of culverts and brief description of any major cuts and fills:

No culverts or major cuts and fills are anticipated.

(6) Surfacing materials: Surfacing material will be native soil on site.

(7) Necessary gates, cattleguards, or fence cuts:

No additional gates, cattleguards or fence cuts are needed.

(8) (New or reconstructed roads are to be center-line flagged at time of location staking.)

The new roadway has been flagged at center-line and is approximately 0.1 mile long.

3. LOCATION OF EXISTING WELLS - Exhibit III

Two mile radius map if exploratory, or one mile radius map if development well, showing and identifying existing: Exhibit I

(1) Water wells:

It is believed a water well is in the NW SW of Sec. 15 T20S R21E shown as the Cunningham Ranch on Access Road Map attached.

(2) Abandoned wells: See Exhibit II

(3) Temporary abandoned wells: None

(4) Disposal wells; None

(5) Drilling wells: None (4-17-78)

(6) Producing wells: See Exhibit III

(7) Shut-in wells: None

(8) Injection wells; None

(9) Monitoring or observation wells for other uses: None

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

A. Within one mile radius of location show the following existing facilities owned or controlled by lessee/operator:

(1) Tank batteries: None

(2) Production facilities: None

EXHIBIT "D" Cont.

(3) Oil gathering lines: None

(4) Gas gathering lines: None

(5) Injection lines: None

(6) Disposal lines: None

(Indicated if any of the above lines are buried.)

B. If new facilities are contemplated, in the event of production show:

(1) Proposed location and attendant lines by flagging if off of well pad: Exhibit IV

All facilities shall be on site and all flow lines will be buried.

(2) Dimensions of facilities: Exhibit IV

Pad will be 200 feet by 125 feet. Production sump 40' x 40'.

(3) Construction methods and materials:

All construction materials for the site will be from on site. No additional materials are anticipated from off site sources.

(4) Protective measures and devices to protect livestock and wildlife:

C. Plan for rehabilitation of disturbed areas no longer needed for operations after construction completed:

Reserve pit will be fenced on 3 sides while drilling, and will be fenced on fourth side when rig moves out. If any oil is on pit, it will be flagged to keep out birds and waterfowl.

5. LOCATION AND TYPE OF WATER SUPPLY

- A. Show location and type of water supply either on map or by written description:

Well water is available in the Cunningham Ranch, as shown on the Access Road Map. Tentative water sources is the Cunningham Ranch. A firm commitment for water has not been negotiated.

- B. State method of transporting water, and show any roads or pipelines needed:

Water will be hauled by truck - see Exhibit V for tentative route.

- C. If water well is to be drilled on lease, so state. (No A. P. D. for water well necessary, however, unless it will penetrate potential hydrocarbon horizons.)

No water well will be drilled.

6. SOURCE OF CONSTRUCTION MATERIALS

- A. Describe where materials, such as sand, gravel, stone, and soil material, are to be obtained and used:

Construction of drilling pad and road will be from dirt in place. In the event of production, surfacing materials will be purchased from a commercial vendor in the area.

7. METHODS FOR HANDLING WASTE DISPOSAL

Describe methods and location of proposed containment and disposal of waste material, including:

- (1) Cuttings: to be contained in reserve pit.
- (2) Drilling fluids: to be contained in reserve pit.
- (3) Produced fluids (oil, water): produced oil will be contained in a test tank. Water will be drained into reserve pit during completion.

Disposal of produced water will depend on amount & salinity as set forth on NTL-2B.

- (4) Sewage: in sanitary pit.
- (5) Garbage and other waste material (trash pits should be fenced with samll mesh wire to prevent wind scattering trash before being burned or buried.)

In burn pit, fenced w/checker wire to be burned (if allowed) and buried.

- (6) Statement regarding proper cleanup of well site area when rig moves out:

The location will be kept free of trash during drilling and completion operations. All material will be hauled away or buried.

8. ANCILLARY FACILITIES

Identify all proposed camps and airstrips on a map as to their location, areas required, and construction methods. (Camp center and airstrip center lines to be staked on the ground.)

9. WELL SITE LAYOUT

A plat (not less than 1" = 50') showing:

- (1) Cross Section of drill pad with cuts and fills:

See attached drawing - see Exhibit VI

- (2) Location of mud tanks, reserve, burn and trash pits, pipe racks, living facilities, and soil material stockpiles:

See Exhibit VI, VII

- (3) Rig orientation, parking areas, and access roads:

See Exhibit VII

- (4) Statement as to whether pits are to be lined or unlined:
(Approval as used in this section means field approval of location. All necessary staking facilities may be done at time of field inspection. A registered surveyor is not mandatory for such operations.)

Pits will be unlined.

10. PLANS FOR RESTORATION OF SURFACE

State restoration program upon completion of operations, including:

- (1) Backfilling, leveling, contouring, and waste disposal; segregation of spoils materials as needed:

Drill site will be backfilled and leveled as soon as possible after the drilling and completion rigs are moved out. All unused areas will be restored & reseeded. Waste material will be buried.

- (2) Revegetation and rehabilitation - including access roads (normally per BLM recommendations)

Top soil will be spread over unused areas, and reseeded to U. S. G. S. specs.

- (3) Prior to rig release, pits will be fenced and so maintained until cleanup:

Reserve pit will be fenced on three sides during drilling, and on fourth side after all equipment is out until pit is backfilled.

- (4) If oil on pit, remove oil or install overhead flagging:

Any oil on pit will be removed, or pit flagged.

- (5) Timetable for commencement and completion of rehabilitation operations:

Rehabilitation will commence as soon as possible. If wells are drilled during summer months, an attempt will be made to cleanup and reseed prior to winter.

11. OTHER INFORMATION

General description of:

- (1) Topography; soil characteristics, geologic features, flora and fauna: on site is nearly flat with soil of sandy loam. No distinguishing geologic features exist. The site vegetation is sagebrush and a few cedar trees. There exists evidence of deer and rabbits.

- (2) Other surface-use activities and surface ownership of all involved lands:
The current surface uses are range grazing and gas and oil field.

- (3) Proximity of water, occupied dwellings, archeological, historical, or cultural sites:
The only running water is in Nash Wash above Cunningham Ranch and they use all water for irrigation of hay fields. Calf Canyon $\frac{1}{4}$ mile west would be best described as an intermittent stream. The only occupied dwellings are at the Cunningham Ranch $1\frac{1}{4}$ mile S-SW of the site. No historical, archaeological or cultural sites were observed.

12. LESSEE'S OR OPERATOR'S REPRESENTATIVE

Include the name, address, and phone number of the lessee's or operator's field representative who is responsible for assuring compliance with the approved surface use and operations plan.

- (1) Mr. Roy Reeves
Suite 420, NBT Bldg.
320 S. Boston
Tulsa, Oklahoma 74103
Office: 918-587-2181
Home: 918-743-8630

- (2) Mr. Charles Simons
Suite 420, Nbt Bldg.
320 S. Boston
Tulsa, Oklahoma 74103
Office: 918-587-2181
Home: 918-371-5819

- (3) Mr. John Pulley
Flint Engineering & Construction Co.
324 Petroleum Bldg.
Billings, Montana 59101
Office: 406-245-4179
Home: 406-259-6156

13. CERTIFICATION:

I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site 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 Dyco Petroleum Corporation and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

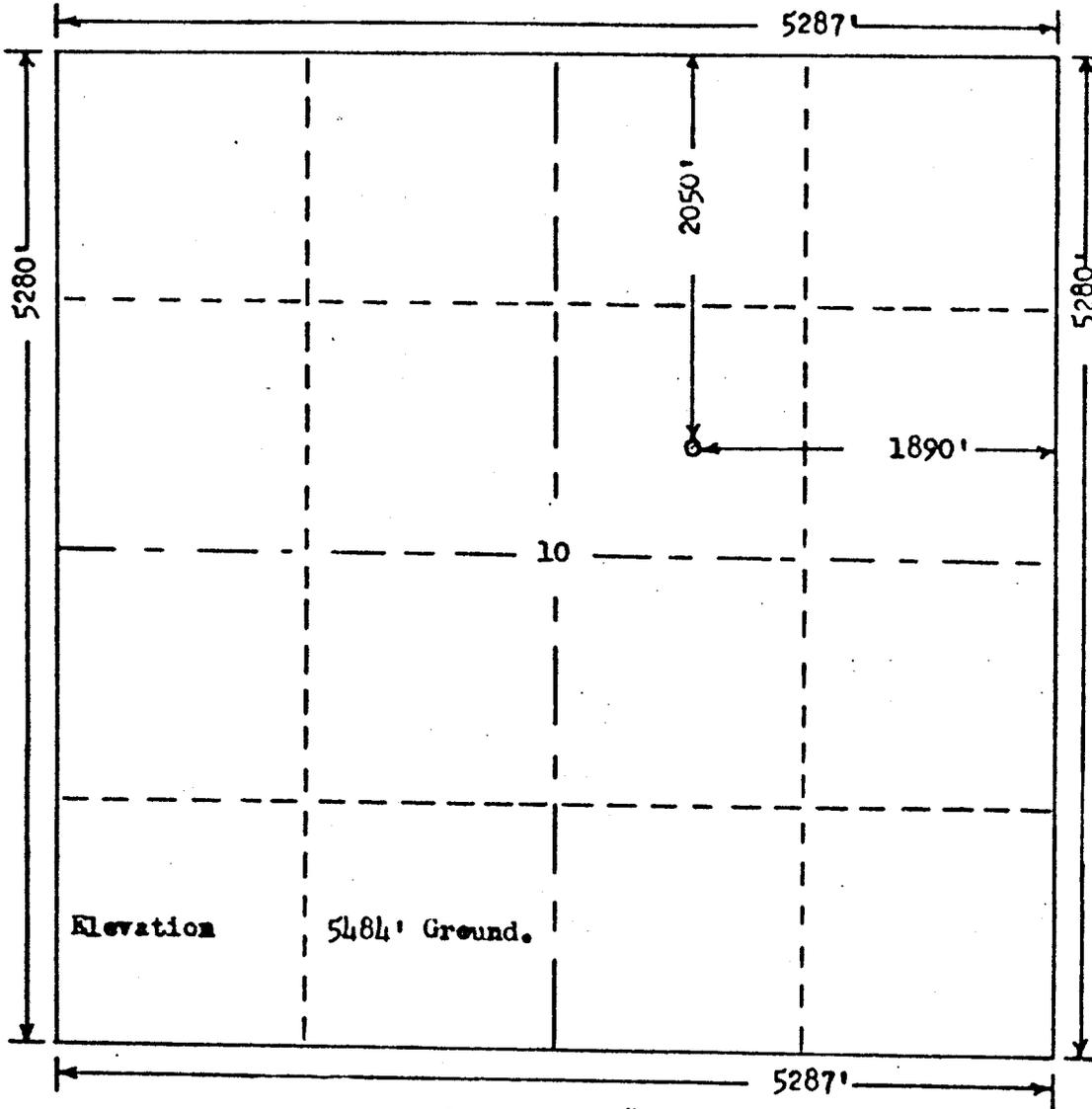
April 25, 1978

DATE

Charles h. Simmons
DYCO PETROLEUM CORPORATION



R. 21 E.



T.
20
S.

Scale... 1" = 1000'

Powers Elevation Company, Inc. of Denver, Colorado
 has in accordance with a request from Jackie
 for Dycs Petroleum Corporation
 determined the location of #2 Cisco
 to be 2050' FN & 1890' FE Section 10 Township 20 S.
 Range 21 E. of the Salt Lake Principal Meridian
 Grand County, Utah

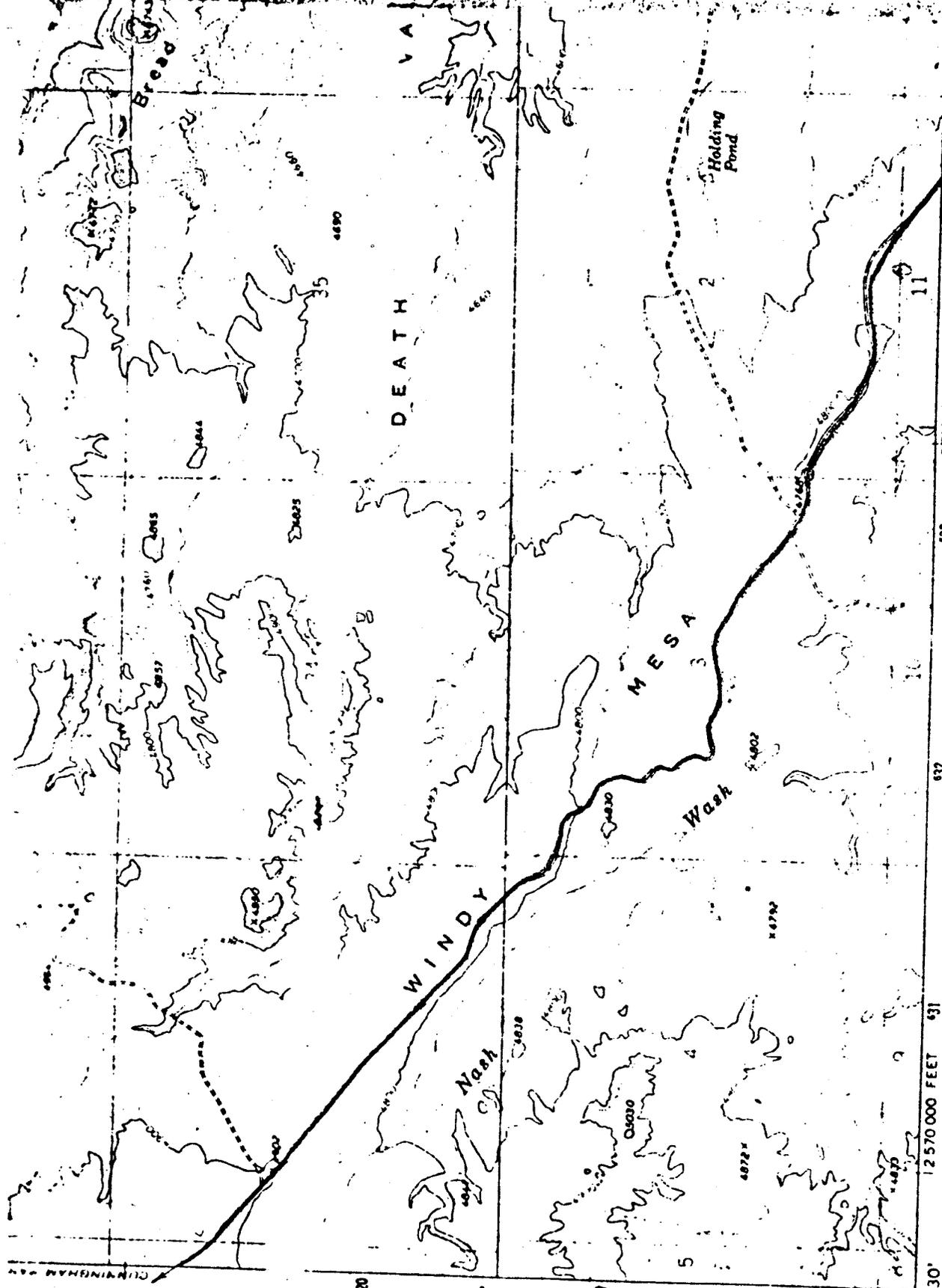
I hereby certify that this plat is an
 accurate representation of a correct
 survey showing the location of

#2 Cisco

Date: 3-15-78

J. L. [Signature]
 Licensed Land Surveyor No. 2711
 State of Utah

Exhibit I



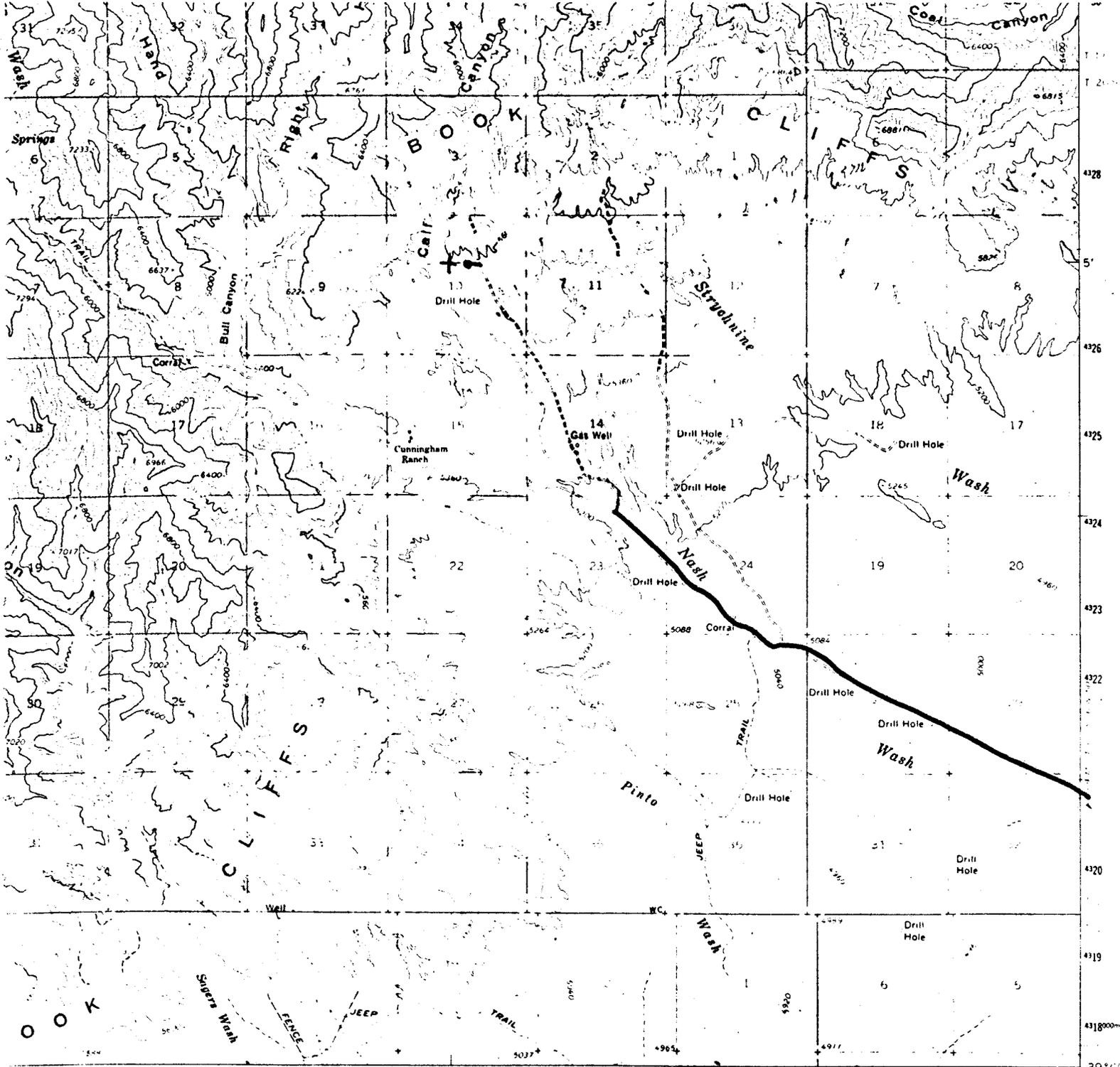
Mapped, edited, and published by the Geological Survey
 Control by USGS and USC&GS

Topography by photogrammetric methods from aerial
 photographs taken 1969. Field checked 1970

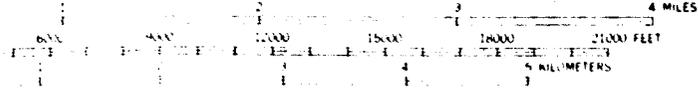
Polyconic projection, 1927 North American datum
 10,000-foot grid based on Utah coordinate system, central zone
 1000-meter Universal Transverse Mercator grid ticks,
 zone 12, shown in blue

Fine red dashed lines indicate selected fence lines

SCALE
 100' 1000' 2000'
 0 1 2 3 4 5
 0.59 1.18 1.77 2.36 2.95 3.54 4.13 4.72 5.31 5.90 6.49 7.08 7.67 8.26 8.85 9.44 10.03 10.62 11.21 11.80 12.39 12.98 13.57 14.16 14.75 15.34 15.93 16.52 17.11 17.70 18.29 18.88 19.47 20.06 20.65 21.24 21.83 22.42 23.01 23.60 24.19 24.78 25.37 25.96 26.55 27.14 27.73 28.32 28.91 29.50 30.09 30.68 31.27 31.86 32.45 33.04 33.63 34.22 34.81 35.40 36.00 36.59 37.18 37.77 38.36 38.95 39.54 40.13 40.72 41.31 41.90 42.49 43.08 43.67 44.26 44.85 45.44 46.03 46.62 47.21 47.80 48.39 48.98 49.57 50.16 50.75 51.34 51.93 52.52 53.11 53.70 54.29 54.88 55.47 56.06 56.65 57.24 57.83 58.42 59.01 59.60 60.19 60.78 61.37 61.96 62.55 63.14 63.73 64.32 64.91 65.50 66.09 66.68 67.27 67.86 68.45 69.04 69.63 70.22 70.81 71.40 72.00 72.59 73.18 73.77 74.36 74.95 75.54 76.13 76.72 77.31 77.90 78.49 79.08 79.67 80.26 80.85 81.44 82.03 82.62 83.21 83.80 84.39 84.98 85.57 86.16 86.75 87.34 87.93 88.52 89.11 89.70 90.29 90.88 91.47 92.06 92.65 93.24 93.83 94.42 95.01 95.60 96.19 96.78 97.37 97.96 98.55 99.14 99.73 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691.18 691.77 692.36 692.95 693.54 694.13 694.72 695.31 695.90 696.49 697.08 697.67 698.26 698.85 699.44 700.03 700.62 701.21 701.80 702.39 702.98 703.57 704.16 704.75 705.34 705.93 706.52 707.11 707.70 708.29 708.88 709.47 710.06 710.65 711.24 711.83 712.42 713.01 713.60 714.19 714.78 715.37 715.96 716.55 717.14 717.73 718.32 718.91 719.50 720.09 720.68 721.27 721.86 722.45 723.04 723.63 724.22 724.81 725.40 726.00 726.59 727.18 727.77 728.36 728.95 729.54 730.13 730.72 731.31 731.90 732.49 733.08 733.67 734.26 734.85 735.44 736.03 736.62 737.21 737.80 738.39 738.98 739.57 740.16 740.75 741.34 741.93 742.52 743.11 743.70 744.29 744.88 745.47 746.06 746.65 747.24 747.83 748.42 749.01 749.60 750.19 750.78 751.37 751.96 752.55 753.14 753.73 754.32 754.91 755.50 756.09 756.68 757.27 757.86 758.45 759.04 759.63 760.22 760.81 761.40 762.00 762.59 763.18 763.77 764.36 764.95 765.54 766.13 766.72 767.31 767.90 768.49 769.08 769.67 770.26 770.85 771.44 772.03 772.62 773.21 773.80 774.39 774.98 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944.36 944.95 945.54 946.13 946.72 947.31 947.90 948.49 949.08 949.67 950.26 950.85 951.44 952.03 952.62 953.21 953.80 954.39 954.98 955.57 956.16 956.75 957.34 957.93 958.52 959.11 959.70 960.29 960.88 961.47 962.06 962.65 963.24 963.83 964.42 965.01 965.60 966.19 966.78 967.37 967.96 968.55 969.14 969.73 970.32 970.91 971.50 972.09 972.68 973.27 973.86 974.45 975.04 975.63 976.22 976.81 977.40 978.00 978.59 979.18 979.77 980.36 980.95 981.54 982.13 982.72 983.31 983.90 984.49 985.08 985.67 986.26 986.85 987.44 988.03 988.62 989.21 989.80 990.39 990.98 991.57 992.16 992.75 993.34 993.93 994.52 995.11 995.70 996.29 996.88 997.47 998.06 99

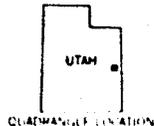


(THOMPSON)
4061 I
SCALE 1:62,500



CONTOUR INTERVAL 80 FEET
DOTTED LINES REPRESENT 40 FOOT CONTOURS
DATUM IS MEAN SEA LEVEL

MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
GEOLOGICAL SURVEY, DENVER 25, COLORADO OR WASHINGTON 25, D. C.
PRINTING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST



INTERIOR-GEOLOGICAL SURVEY WASHINGTON D. C.—1963-T
R 21 E R-22 E 428000' E 109° 30'

ROAD CLASSIFICATION

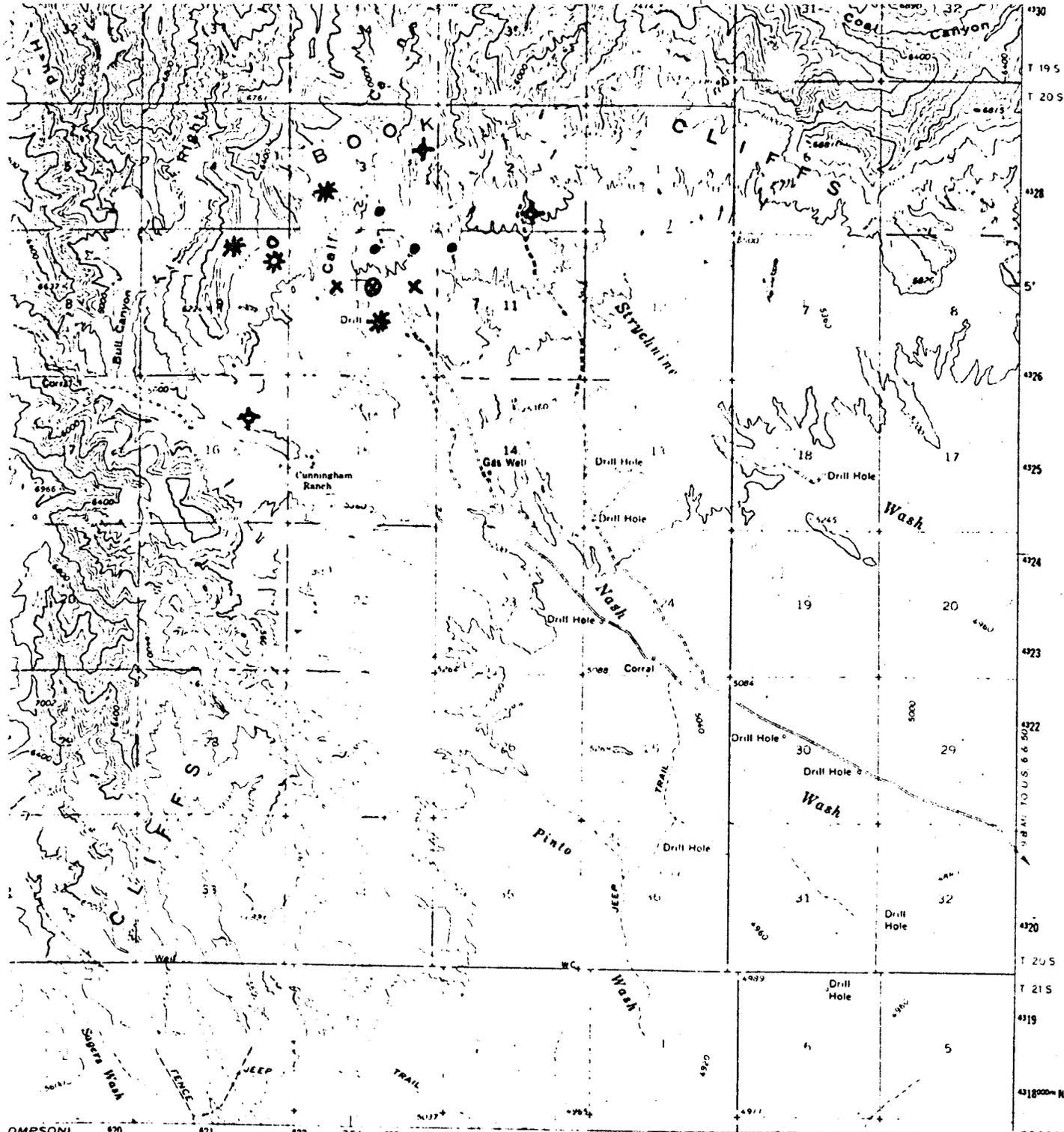
- Light-duty
- Unimproved dirt
- State Route

SEGO CANYON, UTAH
N3900—W10930/15

1963

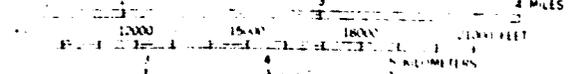
AMS 4062 II—SERIES V797

Exhibit II
Page 1



OMPSON
-061
: 62500

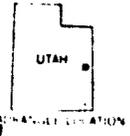
INTERIOR GEOLOGICAL SURVEY WASHINGTON, D. C. - 1963
R 21 E H 22 I 625000m E 109° 30'



VERTICAL INTERVAL 80 FEET
HORIZONTAL INTERVAL 40 FEET
CONTOURS IN FEET FROM SEA LEVEL

CONFORMS TO NATIONAL MAP ACCURACY STANDARDS
OVER 25, COLORADO OR WASHINGTON 25, D. C.
SYMBOLS AND MEANINGS IS AVAILABLE ON REQUEST

- Location
- Oil well
- * Gas well
- * Abandoned Gas well
- ✦ dry hole
- x Dyco Locations.
- ⊕ Location noted in Application.



ROAD CLASSIFICATION

- Light duty
- Unimproved dirt
- State Route

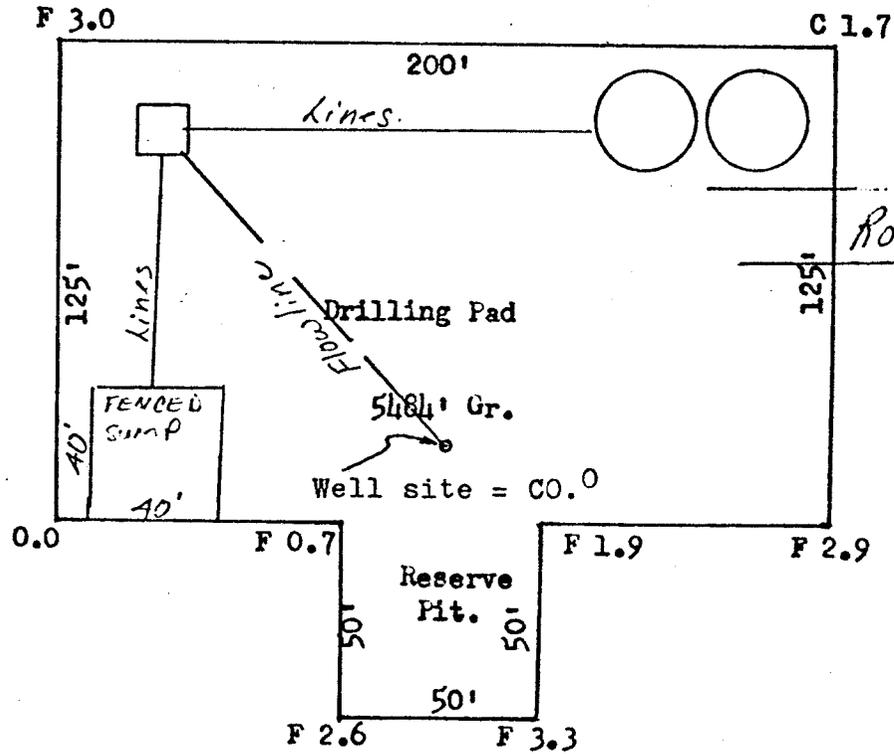
SEGO CANYON, UTAH
N 3900—W 10930/15

1963
AMS 4062 II—SERIES V797

Exhibit III

TOPOGRAPHIC MAP

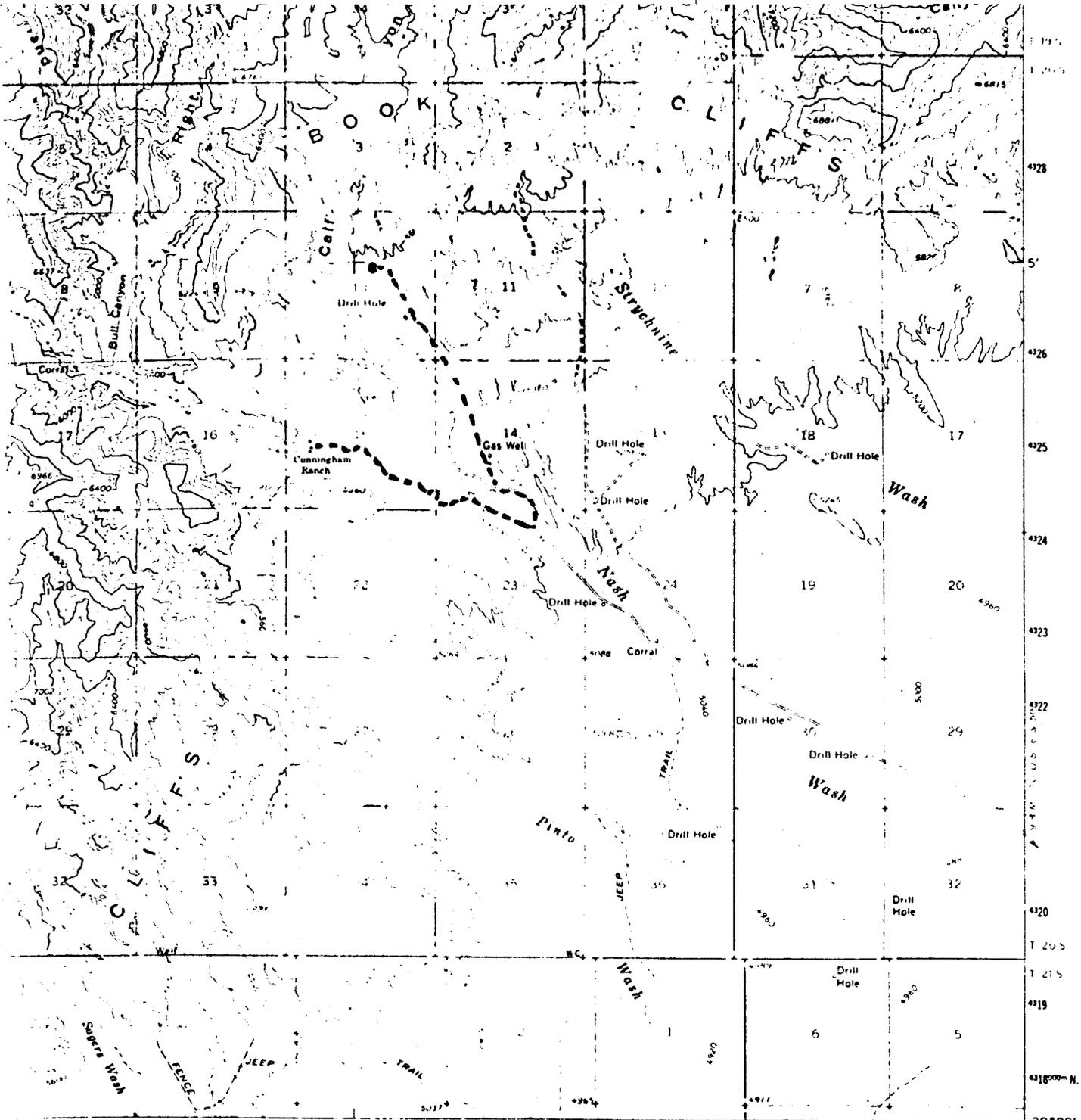
Dyco Petroleum Corp.
#2 Cisco
2050'FN & 1890'FE 10-20S-21E
Grand County, Utah



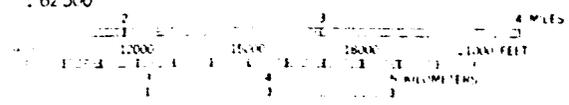
Scale: 1" = 50'

by: *Leonard Powers*
Powers Elevation Company, Inc.

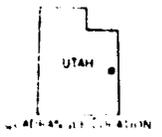
Exhibit IV



OMPSONI 4061 I 62500
 INTERIOR-GEOLOGICAL SURVEY WASHINGTON D C - 1965 I
 R 21 E R 22 E 6280000 E 39°00' 109°30' N



INTERVAL 80 FEET
 40 FOOT CONTOURS
 FROM SEA LEVEL



CONFORMS TO NATIONAL MAP ACCURACY STANDARDS
 UNDER ACT 25, COLORADO OR WASHINGTON 25, D C
 FOR MORE INFORMATION AND SYMBOLS IS AVAILABLE ON REQUEST

ROAD CLASSIFICATION
 Light duty
 Unimproved dirt
 State Route

SEGOO CANYON, UTAH
 N3900—W10930/15

1963

AMS 4062 II—SERIES V797

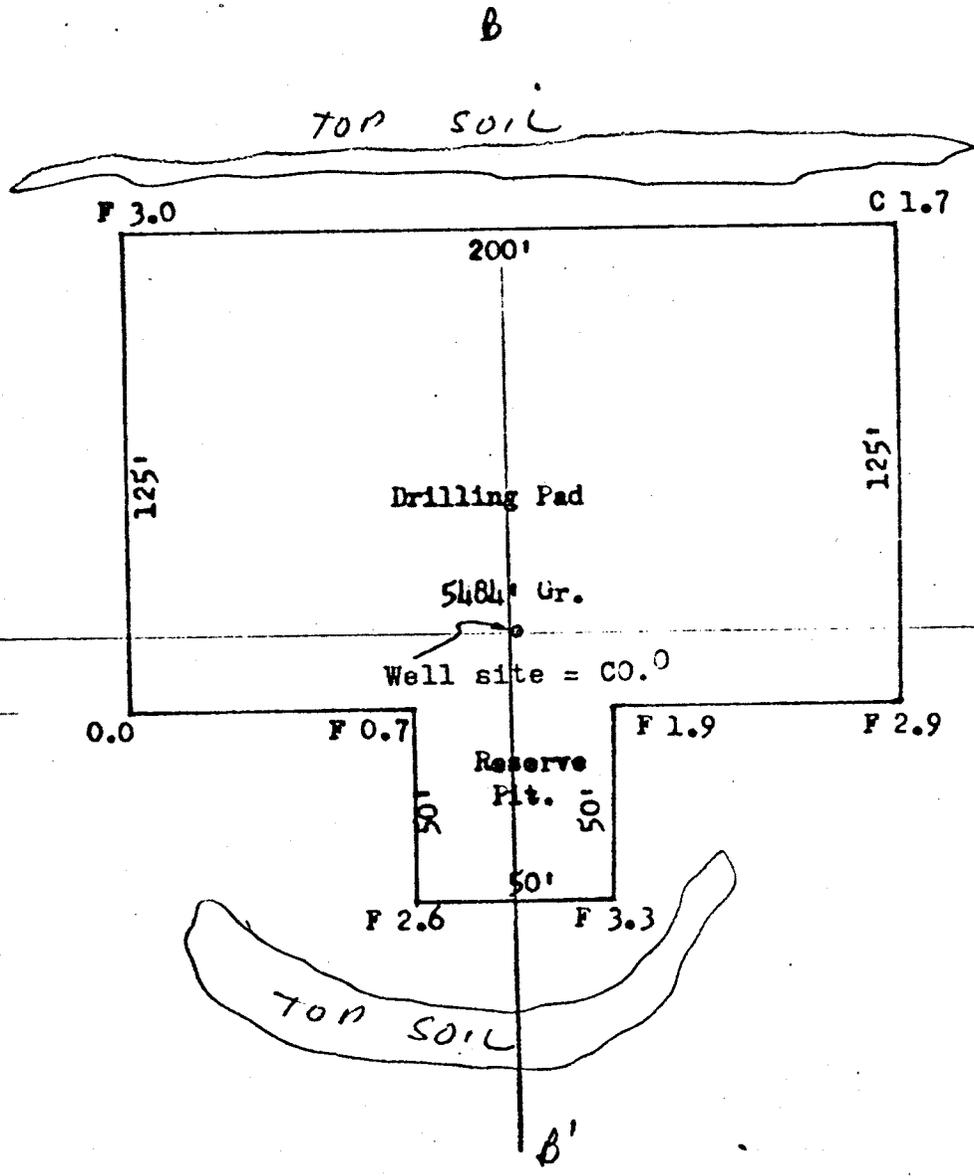
Exhibit IV

TOPOGRAPHIC MAP

Dyco Petroleum Corp.
#2 Cisco
2050'FN & 1890'FE 10-20S-21E
Grand County, Utah



GL
OUT 2.0'



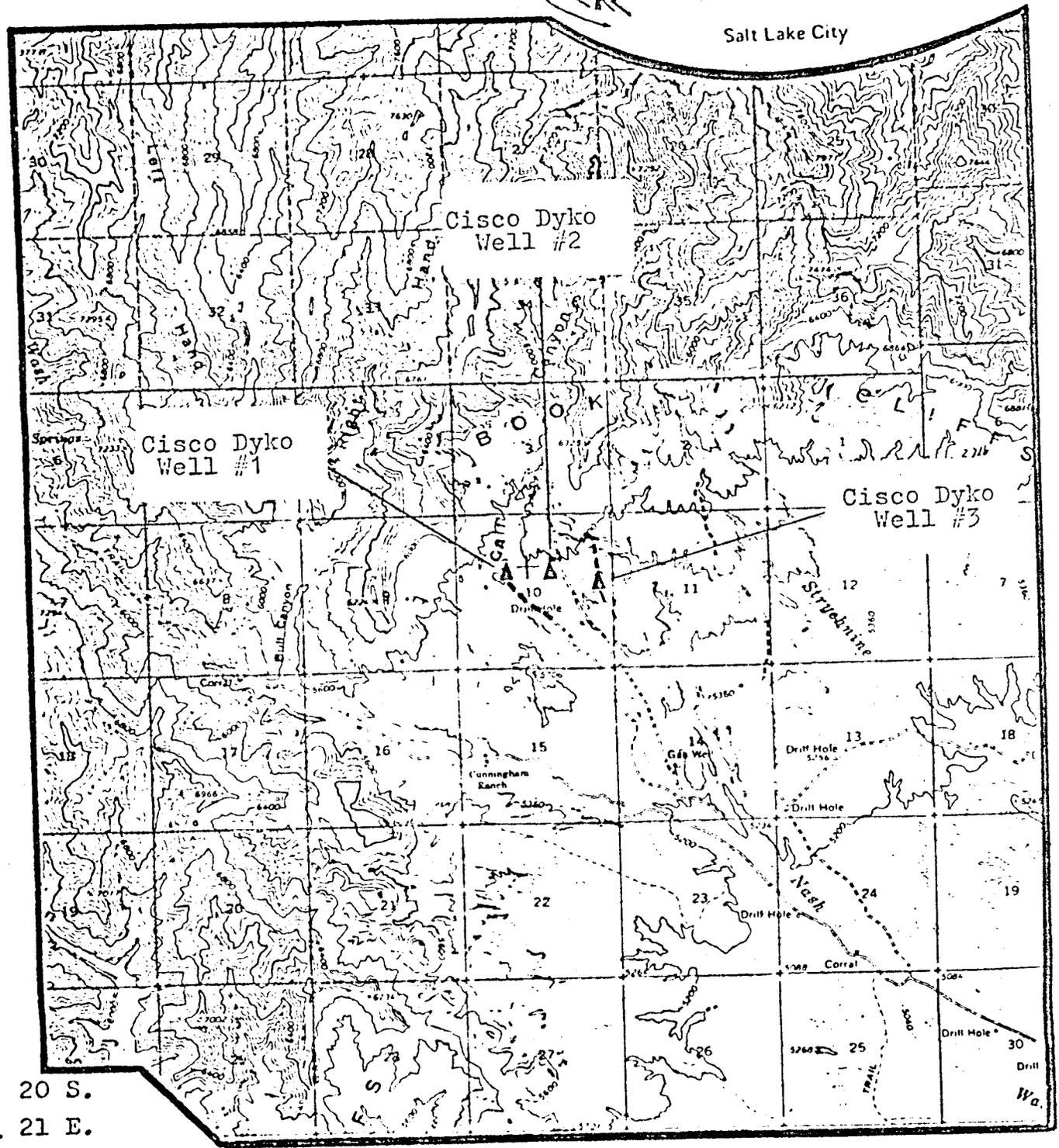
Scale: 1" = 50'

by: *Leonard C. Powers*
Powers Elevation Company, Inc.

Exhibit VI



Salt Lake City



T. 20 S.
R. 21 E.

Meridian: Salt Lake B & M

Quad: Sego Canyon
15' Series

Project: PEC-78-1
Series: East Central
Utah
Date: 3-28-78

Proposed Oil Well Sites in
the Nash Wash Locality of
Grand County, Utah

Legend: Drill Pad ▲
Proposed road - - - -



FIGURE

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Moab District Office

Summary Report of
Inspection for Cultural Resources

BLM Use Only: Use Initials.

File No.

Report Acceptable Yes ___ No ___

Mitigation Acceptable Yes ___ No ___

Comments: _____

1. Project Name, Developer
Powers Elevate Company for Cisco Dyco Petroleum Company (Cisco Dyco Wells #1, 2, and 3) (PEC-78-1)
2. Legal Description of Project Area (Attach Map Also)
Township 20 South, Range 21 East, Section 10
3. Institution Holding Antiquities
NA (no antiquities collected)
4. Antiquities Permit No.
78-Ut-014 (M-9)
5. Dates of Field Work
3-23-78
6. Description of Examination Procedures
Ten meter wide transects were walked across the drill locations which averaged ca. 75 meters by 75 meters, and along the three access routes in a search for cultural remains and indications of both pre-historic and historic occupations.
7. Description of Findings (Attach forms or detailed report, if appropriate)
No cultural resources were observed during the survey.
8. Actual/Potential National Register Properties Affected
No national register properties will be adversely affected by the drilling project.
9. Conclusions/Recommendations 1. All vehicle traffic, personnel movement, and construction be confined to the locations examined and to access road leading into the locations; 2. all personnel refrain from collecting individual artifacts or from disturbing any cultural resources in the area and 3. a qualified archeologist be consulted should cultural remains from subsurface deposits be exposed during construction work or if the need arises to relocate or otherwise alter the drill pad location.
10. Signature of Person in Direct Charge of Field Work
I. R. Hank
11. Signature of Title of Institutional Officer Responsible
I. R. Hank

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

(Other instructions on reverse side)

Budget Bureau No. 42-R1423.

5. LEASE DESIGNATION AND SERIAL NO.

U-38359

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Cisco - Federal

9. WELL NO.

2

10. FIELD AND POOL, OR WILDCAT

CISCO DOME

11. SEC., T., R. M., OR B.L.K. AND SURVEY OR AREA

Sec 10 T20S R21E

12. COUNTY OR PARISH

Grand

13. STATE

Utah

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL

DEEPEN

PLUG BACK

b. TYPE OF WELL

OIL WELL

GAS WELL

OTHER

SINGLE ZONE

MULTIPLE ZONE

2. NAME OF OPERATOR

DYCO PETROLEUM CORPORATION

3. ADDRESS OF OPERATOR

420 NBT Bldg., 320 S. Boston, Tulsa, Oklahoma 74103

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

At surface

2050' FN & 1890' FE

At proposed prod. zone

N/A

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

18.8 N-NW of Cisco, Utah

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 1890'

16. NO. OF ACRES IN LEASE

120

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.

1320' + south

19. PROPOSED DEPTH

3500

20. ROTARY OR CABLE TOOLS

Rotary

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

5484' Ground

22. APPROX. DATE WORK WILL START*

July 10, 1978

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8-5/8"	24	350	To surface
4 1/2"	4 1/2"	10.5	3500	Across pay

1. Drill 12 1/4" hole to + 350', set 8-5/8" csg, cement to surface.
2. Drill 7-7/8" hole to 3500'.
3. Run 4 1/2" csg if productive.
4. P&A per U. S. G. S. instructions if dry hole.

GEOLOGICAL SURVEY

MAY 1 - 1978

SALT LAKE CITY, UTAH
MINERAL EVALUATION.

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 Charles L. Simon TITLE Area Engineer DATE 4-25-78

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

m.e.

*See Instructions On Reverse Side

DRILLING PLAN

1. SURFACE FORMATION

A. Mancos ✓

2. GEOLOGICAL TOPS

A. Dakota	3200	oil
B. Cedar Mountain	3300	oil or gas
C. Morrison	3400	gas
D. Salt Wash	3600	gas
E. T.D.	3800	

3. DEPTHS OF ANTICIPATED OIL, WATER OR GAS

A. See above

4. CASING PROGRAM

- A. Surface: set 350' 8-5/8" 24# K-55 ST&C new casing & cement to surface with 250 sks Class "G".
- B. Production: set 4 1/2" 10.5# K-55 ST&C @ TD. Cement across pay zones.

5. PRESSURE CONTROL EQUIPMENT

- A. Double ram 10" - 900 Series B.O.P. w/2" kill line, and 2" manifold to pit & mud tanks.
- B. B.O.P. to be tested to 1000 psi prior to drilling out shoe jt, then pipe rams operational tested daily, blind rams to be operational tested on trips. B.O.P. stack & manifold to be visually inspected daily. See Attachment.

6. DRILLING FLUID PROGRAM

- A. 0 - 350 - water, with gel & lime if necessary.
- B. 350 - TD - chemical gel mud to top Dakota: 8.7 - 8.9 wt, 34 - 38 vis, 20 cc water loss. On top Dakota increase vis to 38 - 44, lower water loss to 10 - 15 cc to drill to TD.
Lost circulation material to be on location.

7. AUXILIARY EQUIPMENT

- A. Upper Kelly Cock
- B. Float @ bit
- C. Mud system will be visually monitored
- D. Stabbing valve on floor
- E. Hole to be kept full on trips

8. EVALUATION PROGRAM

- A. Cores - None planned
- B. DST - Across Dakota if deemed advisable
- C. Logs - Dual Induction TD - base surface
CNL - Density TD - base surface
Sonic TD - base surface

9. HAZARDS

- A. No abnormal pressures or temperatures are anticipated in this area. No H₂S is anticipated. Possible lost circulation if mud weight gets too high will have lost circulation material on location.

10. DATES

- A. No definite date on rig availability at the moment. Estimate will start first part of July. Drilling operation should take about ten days. If completion rig is available immediately after drilling, 5 days for rig move, location cleanup, and move in completion rig. Completion time estimate at 15 days, additional 15 day to set production equipment.

United States Department of the Interior
Geological Survey
8440 Federal Building
Salt Lake City, Utah 84138

Usual Environmental Analysis

Lease No. U-38359

Operator Dyco Petroleum Corp.

Well No. 2

Location 2050' FNL 1890' FEL Sec. 10 T. 20S R. 21 E

County Grand State Utah Field Cisco Dome

Status: Surface Ownership Public Minerals Public

Joint Field Inspection Date May 17, 1978

Participants and Organizations:

Rocky Curnutt

BLM

John Evans

USGS

Jim Desjarlais

Operator

Related Environmental Analyses and References:

- (1) Grand Area Oil & Gas EAR, BLM, Utah
- (2) Book Mountain Unit Resource Analysis, BLM, Utah

NOTED JOHN T. EVANS, JR.

6/21/78

Analysis Prepared by:

John T. Evans
Environmental Scientist
Salt Lake City, Utah

Date June 16, 1978

Proposed Action:

On April 28, 1978, Dyco Petroleum filed an Application for Permit to Drill the No. 2 exploratory well, a 3500 foot oil and gas test of the Dakota, Cedar Mountain, Morrison, and Salt Wash Formations; located at an elevation of 5484 ft. in the SW/4 NE/4 Sec. 10, T.20S., R.21E. on Federal mineral lands and Public surface; lease No. U-38359. There was no objection raised to the wellsite nor to the access road.

A rotary rig would be used for the drilling. An adequate casing and cementing program is proposed. Fresh-water sands and other mineral-bearing formations would be protected. A Blowout Preventer would be used during the drilling of the well. The proposed pressure rating should be adequate. Details of the operator's NTL-6 10-Point Subsurface and 13-Point Surface Protection Plans are on file in the U.S.G.S. District Office in Salt Lake City, Utah and the U.S.G.S. Northern Rocky Mountain Area Office in Casper, Wyoming.

A working agreement has been reached with the BLM, controlling surface agency. Rehabilitation plans would be decided upon as the well neared completion; the Surface Management Agency would be consulted for technical expertise on those arrangements.

The operator proposes to construct a drill pad 125 ft. wide x 200 ft. and a reserve pit 50 ft. x 75 ft. A new access road will be constructed 18 ft. wide x 0.1 miles long from an existing and improved road. The operator proposes to construct production facilities on disturbed area of the proposed drill pad.

If production is established, a flow line will be built between Loc. #2&3. The anticipated starting date is July 10, 1978 and duration of drilling activities would be about 25 days.

Location and Natural Setting:

The proposed drillsite is approximately 18.8 miles NNW of Cisco, Utah, the nearest town. A fair road runs to within 0.1 miles of the location. The well is in the Cisco field.

Topography:

The area is on a ridge top that slopes to the south. The location drops off steeply to the west to Calf Canyon. The area is generally flat.

Geology:

The surface geology is Mancos. The soil is sandy clays. No geologic hazards are known near the drillsite. Seismic risk for the area is minor. Anticipated geologic tops are filed with the 10-Point Subsurface Protection Plan.

Approval of the proposed action would be conditioned that adequate and sufficient electric, radioactive, density logging surveys would be made to locate and identify any potential mineral resources. Production casing and cementing would be adjusted to assure no influence of the hydrocarbon zones through the well bore on these minerals. In the event the well is abandoned, cement plugs will be placed with drilling fluid in the hole to assure protection of any mineral resources.

The potential for loss of circulation would exist and is possible. Loss of circulation may result in the lowering of the mud levels, which might permit exposed upper formations to blow out or to cause formation to slough and stick to drill pipe. A loss of circulation would result in contamination due to the introduction of drilling muds, mud chemicals, filler materials, and water deep into the permeable zone, fissures, fractures, and caverns within the formation in which fluid loss is occurring. The use of special drilling techniques, drilling muds, and lost circulation materials may be effective in controlling lost circulation.

A geologic review of the proposed action has been furnished by the Area Geologist, U. S. Geological Survey, Salt Lake City, Utah. The operator's drilling, cementing, casing, and blowout prevention programs have been reviewed by the Geological Survey engineers and determined to be adequate.

Soils:

No detailed soil survey has been made of the project area. The top soils in the area range from a sandy clay to a clay type soil. The soil is subject to runoff from rainfall and has a high runoff potential and sediment production would be high. The soils are mildly to moderately alkaline and support the salt-desert shrub community. The pinion, juniper association is also present.

Top soil would be removed from the surface and stockpiled. The soil would be spread over the surface of disturbed areas when abandoned to aid in rehabilitation of the surface. Rehabilitation is necessary to prevent erosion and encroachment of undesired species on the disturbed areas. The operator proposes to rehabilitate the location and access roads per the recommendations of the Bureau of Land Management.

Approximately two acres of land would be stripped of vegetation. This would increase the erosional potential. Proper construction practice, construction of water bars, reseeding of slope-cut area, would minimize this impact.

The proposed action should have minimum impact on pinion-junipers as the proposed location is mainly sagebrush.

Air:

No specific data on air quality is available at the proposed location. There would be a minor increase in air pollution due to emissions from rig and support traffic engines. Particulate matter would increase due to dust from travel over unpaved dirt roads. The potential for increased air pollution due to leaks, spills, and fire would be possible.

Relatively heavy traffic would be anticipated during the drilling-operations phase, increasing dust levels and exhaust pollutants in the area. If the well was to be completed for production, traffic would

be reduced substantially to a maintenance schedule with a corresponding decrease of dust levels and exhaust pollutants to minor levels. If the project results in a dry hole, all operations and impact from vehicular traffic would cease after abandonment. Due to the limited number of service vehicles and limited time span of their operation, the air quality would not be substantially reduced. Toxic or noxious gases would not be anticipated.

Precipitation:

Annual rainfall should range from about 6 to 8" at the proposed location. The majority of the numerous drainages in the surrounding area are of a non-perennial nature flowing only during early spring runoff and during extremely heavy rain storms. This type of storm is rather uncommon as the normal annual precipitation is around 6". Most beneficial moisture comes from snowfall.

Winds are medium and gusty, occurring predominately from east to west. Air mass inversions are occasional. The climate is semi-arid with abundant sunshine, hot summers and cold winters with temperature variations on a daily and seasonal basis.

Surface Water Hydrology:

The proposed action due to the distance from major drainage pattern should have minor impact on surface water systems. Production tanks should have berms to contain spills and leaks.

Some additional erosion would be expected in the area since surface vegetation would be removed. If erosion became serious, drainage systems such as water bars and dikes would be installed to minimize the problem. The potentials of pollution would be present from leaks or spills. The operator is required to report and clean-up all spills or leaks.

Ground Water Hydrology:

Some minor pollution of ground water systems would occur with the introduction of drilling fluids (filtrate) into the aquifer. This is normal and unavoidable during rotary drilling operations. The potential for communication, contamination and commingling of formations via the well bore would be possible. The drilling program is designed to prevent this. There is need for more data on hydrologic systems in the area and the drilling of this well may provide some basic information as all shows of fresh water would be reported. Water production with the gas would require disposal of produced water per the requirements of NTL-2B.

The depths of fresh-water formations are listed in the 10-Point Subsurface Protection plan.

There would be no tangible effect on water migration in fresh-water aquifers. The pits would be unlined. If fresh water should be available from the well, the owner or surface agency may request completion as a water well if given approval.

Vegetation:

Plants in the area are of the salt-desert-shrub types grading to the pinon-juniper association.

Proposed action would remove about two acres of vegetation. Removal of vegetation would increase the erosional potential and there would be a minor decrease in the amount of vegetation available for grazing.

The operator proposes to rehabilitate the surface upon completion of operations.

Wildlife:

The area is in a deer winter range. The lease has special stipulations on activity.

Animal and plant inventory has been made by the BLM. No endangered plants or animals are known to inhabit on the project area. The fauna of the area consists predominately of the mule deer, coyotes, rabbits, and varieties of small ground squirrels and other types of rodents and various types of reptiles. The area is used by man for the primary purpose of grazing domestic livestock and sheep.

The birds of the area are raptors, finches, ground sparrows, magpies, crows, and jays.

Social-Economic Effect:

An on the ground surface archaeological reconnaissance has been made of the proposed action. Appropriate clearances have been obtained from the surface managing agency. If a historic artifact, an archaeological feature or site is discovered during construction operations; activity would cease until the extent, the scientific importance, and the method of mitigating the adverse effects could be determined by a qualified cultural resource specialist.

There are no occupied dwellings or other facilities of this nature in the general area. Minor distractions from aesthetics would occur over the lifetime of the project and is judged to be minor. All permanent facilities placed on the location would be painted light sand color to blend in with the natural environment. Present use of the area is grazing, recreation, and oil and gas activities.

Noise from the drilling operation may temporarily disturb wildlife and people in the area. Noise levels would be moderately high during drilling and completion operations. Upon completion, noise levels would be infrequent and significantly less. If the area is abandoned, noise levels should return to pre-drilling levels.

The site is not visible from any major roads. After drilling operations, completion equipment would be visible to passersby of the area but would not present a major intrusion.

The economic effect of one well would be difficult to determine. The overall effect of oil and gas drilling and production activity are significant in Grand County. But should this well discover a significant new hydrocarbon source, local, state and possibly national economies might be improved. In this instance, other development wells would be anticipated, with substantially greater environmental and economic impacts.

Should the wellsite be abandoned, surface rehabilitation would be done according to the surface agency's requirements and to USGS's satisfaction. This would involve leveling, contouring, reseeding, etc., of the location and possibly the access road. If the well should produce hydrocarbons, measures would be undertaken to protect wildlife and domestic stock from the production equipment.

Land Use:

Land use is recreation, livestock and wildlife grazing and oil and gas operations. There are no national, state, or local parks, forests, wildlife refuges ~~or ranges~~, grasslands, monuments, trails or other formally designated recreational facilities near the proposed location.

Area in a deer winter range,

The proposed location is within the Book Mountain Planning Unit (06-01). This Environmental Assessment Record was compiled by the Bureau of Land Management, the surface managing agency of the Federal surface in the area. The study includes additional information on the environmental impact of oil and gas operations in this area and gives land use recommendations. The E.A.R. is on file in the agency's State offices and is incorporated herein by reference.

Waste Disposal:

The mud and reserve pits would contain all fluids used during the drilling operations. A trash pit would be utilized for any solid wastes generated at the site and would be burned or buried at the completion of the operations. Sewage would be handled according to State sanitary codes. For further information, see the 13-Point Surface Plan.

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.

Under leasing provisions, the Geological Survey has an obligation to allow mineral development if the environmental consequences are not too severe or irreversible. Upon rehabilitation of the site, the environmental effects of this action would be substantially mitigated, if not totally annulled. Permanent damage to the surface and subsurface would be prevented as much as possible under U.S.G.S. and other controlling agencies supervision with rehabilitation planning reversing almost all effects. Additionally, the growing scarcity of oil and gas should be taken into consideration. Therefore, the alternative of not proceeding with the proposed action at this time is rejected.

2. Minor relocation of the wellsite and access road or any special, restrictive stipulations or modifications to the proposed program would not significantly reduce the environmental impact. There are no severe vegetative, animal or archaeological-historical-cultural conflicts at the site. Since only a minor impact on the environment would be expected, the alternative of moving the location is rejected. At abandonment, normal rehabilitation of the area such as contouring, reseeding, etc., would be undertaken with an eventual return to the present status as outlined in the 13-Point Surface Plan. Berms required around production tanks.

Adverse Environmental Effects Which Cannot Be Avoided:

Surface disturbance and removal of vegetation from approximately two acres of land surface for the lifetime of the project which would result in increased and accelerated erosional potential. Grazing would be eliminated in the disturbed areas and there would be a minor and temporary disturbance of wildlife and livestock. Minor induced air pollution due to exhaust emissions from rig engines of support traffic engines would occur. Minor increase in dust pollution would occur due to vehicular traffic associated with the operation. If the well is a

gas producer, additional surface disturbance would be required to install production pipelines. The potential for fires, leaks, spills of gas, oil or water would exist. During the construction and drilling phases of the project, noise levels would increase. Potential for sub-surface damage to fresh water aquifers and other geologic formations exists. Minor distractions from aesthetics during the lifetime of the project would exist. If the well is a producer, an irreplaceable and irretrievable commitment of resources would be made. Erosion from the site would eventually be carried as sediment in the Colorado River. The potential for pollution to the Calf Canyon would exist through leaks and spills.

Determination:

This requested action does not constitute a major Federal action significantly affecting the environment in the sense of NEPA, sec. 102(2)(c).



ACTING

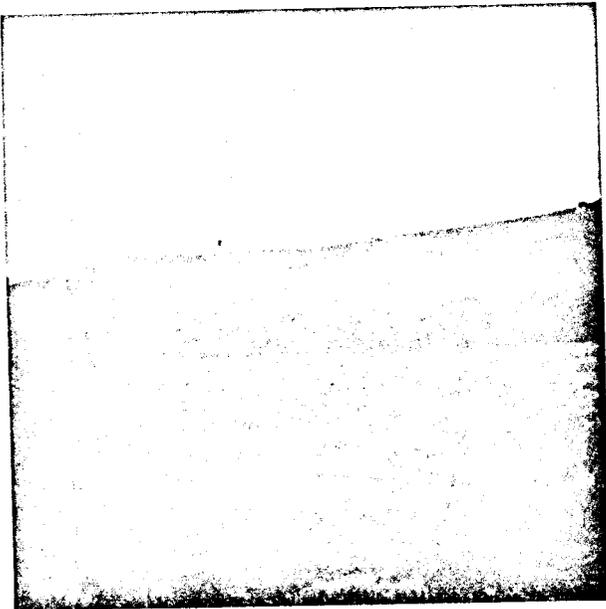
District Engineer

U. S. Geological Survey

Conservation Division

Oil and Gas Operations

Salt Lake City, Utah



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

6. Lease Designation and Serial No.
U-38359

6. If Indian, Allottee or Tribe Name

7. Unit Agreement Name

8. Farm or Lease Name

Cisco - Federal

9. Well No.

2

10. Field and Pool, or Wildcat

CISCO DOME

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

Sec 10-T20S-R21E

12. County or Parrish 13. State

Grand Utah

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work

DRILL

DEEPEN

PLUG BACK

b. Type of Well

Oil Well

Gas Well

Other

Single Zone

Multiple Zone

2. Name of Operator

DYCO PETROLEUM CORPORATION

3. Address of Operator

420 NBT Bdg., 320 S. Boston, Tulsa, Oklahoma 74103

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

At surface

2050' FN & 1890' FE

At proposed prod. zone

NA

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

18.8 N-NW of Cisco, Utah

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

1890'

16. No. of acres in lease

120

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.

1320' + south

19. Proposed depth

3500

20. Rotary or cable tools

Rotary

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

5484' Ground

22. Approx. date work will start*

July 10, 1978

23. PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
12 1/4	8-5/8"	24	350	To Surface
4 1/2	4 1/2"	10.5	3500	Across Pay

This well is on Federal lease, see attached plans for drilling and completing.

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 Charles L. Simon Title Area Engineer Date 4-26-78

(This space for Federal or State office use)

Permit No. _____ Approval Date _____

Approved by _____ Title _____ Date _____

Conditions of approval, if any:

DRILLING PLAN

1. SURFACE FORMATION

A. Mancos

2. GEOLOGICAL TOPS

A. Dakota	3200	oil
B. Cedar Mountain	3300	oil or gas
C. Morrison	3400	gas
D. Salt Wash	3600	gas
E. T.D.	3800	

3. DEPTHS OF ANTICIPATED OIL, WATER OR GAS

A. See above

4. CASING PROGRAM

- A. Surface: set 350' 8-5/8" 24# K-55 ST&C new casing & cement to surface with 250 sks Class "G".
- B. Production: set 4 $\frac{1}{2}$ " 10.5# K-55 ST&C @ TD. Cement across pay zones.

5. PRESSURE CONTROL EQUIPMENT

- A. Double ram 10" - 900 Series B.O.P. w/2" kill line, and 2" manifold to pit & mud tanks.
- B. B.O.P. to be tested to 1000 psi prior to drilling out shoe jt, then pipe rams operational tested daily, blind rams to be operational tested on trips. B.O.P. stack & manifold to be visually inspected daily. See Attachment.

6. DRILLING FLUID PROGRAM

- A. 0 - 350 - water, with gel & lime if necessary.
- B. 350 - TD - chemical gel mud to top Dakota: 8.7 - 8.9 wt, 34 - 38 vis, 20 cc water loss. On top Dakota increase vis to 38 - 44, lower water loss to 10 - 15 cc to drill to TD.
Lost circulation material to be on location.

7. AUXILIARY EQUIPMENT

- A. Upper Kelly Cock
- B. Float @ bit
- C. Mud system will be visually monitored
- D. Stabbing valve on floor
- E. Hole to be kept full on trips

8. EVALUATION PROGRAM

- A. Cores - None planned
- B. DST - Across Dakota if deemed advisable
- C. Logs - Dual Induction TD - base surface
CNL - Density TD - base surface
Sonic TD - base surface

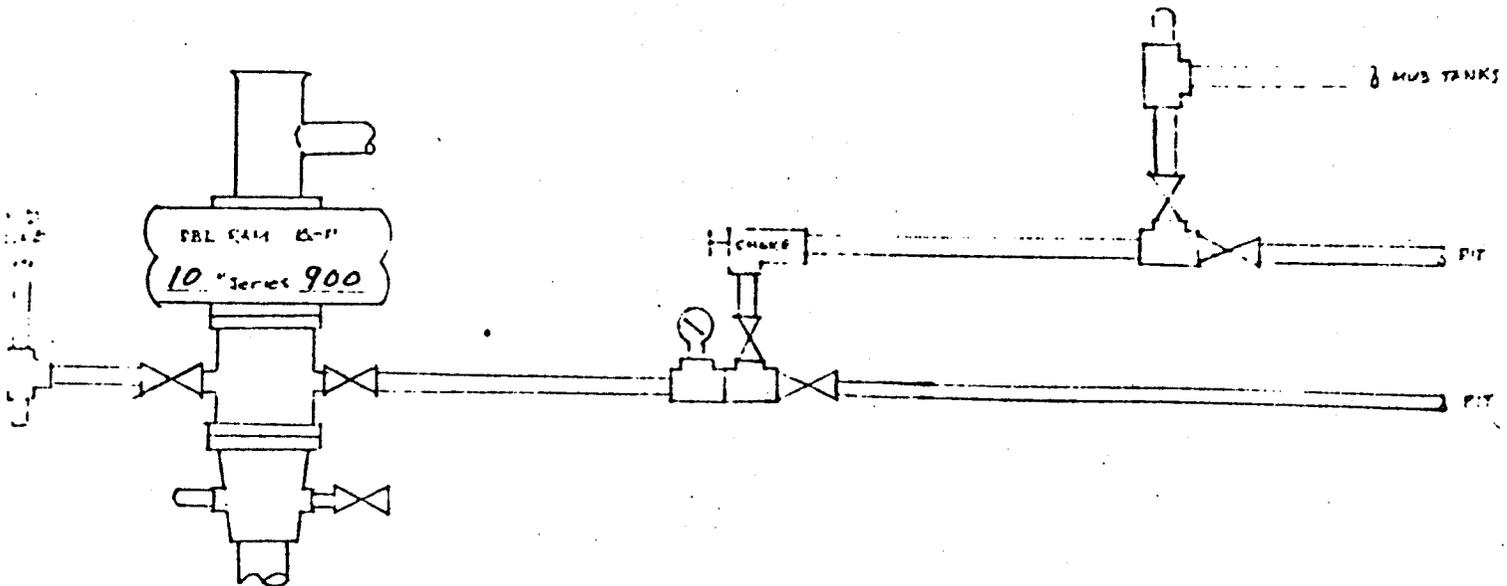
9. HAZARDS

- A. No abnormal pressures or temperatures are anticipated in this area. No H₂S is anticipated. Possible lost circulation if mud weight gets too high will have lost circulation material on location.

10. DATES

- A. No definite date on rig availability at the moment. Estimate will start first part of July. Drilling operation should take about ten days. If completion rig is available immediately after drilling, 5 days for rig move, location cleanup, and move in completion rig. Completion time estimate at 15 days, additional 15 day to set production equipment.

Typical Minimum BOP Specs



Auxiliary Equipment and Notes

1. All lines and valves to be minimum 2"/3000 psi WP.
2. All bolts to be installed and tight.
3. All crew members to be trained in and familiar with BOP equipment, accumulators, and procedures.
4. Hole to be kept full at all times.
- ~~5. _____, to be on the floor at all times.~~
6. An inside BOP to be on the floor at all times.
7. An upper kelly-cock to be used at all times.
8. (a) After nipping up, preventers will be pressure tested at 1000 psi for 15 minutes before drilling out.
(b) BOP will be inspected and operated at least daily to insure good working order.
(c) All pressure and operating tests will be recorded on daily drilling report.

EXHIBIT "D"

MULTI-POINT REQUIREMENTS TO ACCOMPANY A. P. D.

1. EXISTING ROADS - a legible map showing:

- A. Proposed well site as staked.
(The proposed well site and elevation plat is shown)

See attached survey plat - Exhibit I.

- B. Route and distance from nearest town or locatable reference point to where well access route leaves main road.
The nearest town is Cisco, Utah. From Cisco go southwest along #128 3.6 miles to Windy Mesa Road, thence northwest 11.9 miles to corrals and gate, thence northwest 1.2 miles to junction of roads NE NW, thence right along road N-NW 0.5 mile to junction of roads, thence right 1.5 miles N-NW along road to proposed access road which is less than 0.1 mile long, to location in SW NE Sec. 10 T20S R21E. Also see Access Road Map.

- C. Access road (s) to location color-coded or labeled.

See Access Road Map - Exhibit II, 1, 2, & 3.

Red - Paved

Green - Gravel

Yellow - Trail

Orange - New Road

- D. If exploratory well, all existing roads within a 3-mile radius (including type of surface, conditions, etc.)

N/A

- E. If development well, all existing roads within a 1-mile radius of well site.

See Access Road Map - Exhibit II, page 1.

- F. Plans for improvement and/or maintenance of existing roads.

No improvements are anticipated for the existing road. Maintenance will be done as needed to ensure safe vehicular and machinery traffic flow.

2. PLANNED ACCESS ROADS:

Map showing all necessary access roads to be constructed or reconstructed, showing: See Exhibit II, page 1, orange road.

(1) Width:

Roads will be 18 feet to allow two way traffic.

(2) Maximum grade: Average grade will be 3%, but maximum will not exceed 8%.

(3) Turnouts: No new turnouts are anticipated.

(4) Drainage design: Water bars will be provided on the new road to guarantee drainage off location and to conform to natural drainage.

(5) Location and size of culverts and brief description of any major cuts and fills:

No culverts or major cuts and fills are anticipated.

(6) Surfacing materials: Surfacing material will be native soil on site.

(7) Necessary gates, cattleguards, or fence cuts:

No additional gates, cattleguards or fence cuts are needed.

(8) (New or reconstructed roads are to be center-line flagged at time of location staking.)

The new roadway has been flagged at center-line and is approximately 0.1 mile long.

3. LOCATION OF EXISTING WELLS - Exhibit III

Two mile radius map if exploratory, or one mile radius map if development well, showing and identifying existing: Exhibit I

(1) Water wells:

It is believed a water well is in the NW SW of Sec. 15 T20S R21E shown as the Cunningham Ranch on Access Road Map attached.

(2) Abandoned wells: See Exhibit II

(3) Temporary abandoned wells: None

(4) Disposal wells; None

(5) Drilling wells: None (4-17-78)

(6) Producing wells: See Exhibit III

(7) Shut-in wells: None

(8) Injection wells; None

(9) Monitoring or observation wells for other uses: None

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

A. Within one mile radius of location show the following existing facilities owned or controlled by lessee/operator:

(1) Tank batteries: None

(2) Production facilities: None

EXHIBIT "D" Cont.

- (3) Oil gathering lines: None
- (4) Gas gathering lines: None
- (5) Injection lines: None
- (6) Disposal lines: None

(Indicated if any of the above lines are buried.)

B. If new facilities are contemplated, in the event of production show:

- (1) Proposed location and attendant lines by flagging if off of well pad: Exhibit IV

All facilities shall be on site and all flow lines will be buried.

- (2) Dimensions of facilities: Exhibit IV

Pad will be 200 feet by 125 feet. Production sump 40' x 40'.

- (3) Construction methods and materials:

All construction materials for the site will be from on site. No additional materials are anticipated from off site sources.

- (4) Protective measures and devices to protect livestock and wildlife:

C. Plan for rehabilitation of disturbed areas no longer needed for operations after construction completed:

Reserve pit will be fenced on 3 sides while drilling, and will be fenced on fourth side when rig moves out. If any oil is on pit, it will be flagged to keep out birds and waterfowl.

5. LOCATION AND TYPE OF WATER SUPPLY

- A. Show location and type of water supply either on map or by written description:
Well water is available in the Cunningham Ranch, as shown on the Access Road Map. Tentative water sources is the Cunningham Ranch. A firm commitment for water has not been negotiated.
- B. State method of transporting water, and show any roads or pipelines needed:
Water will be hauled by truck - see Exhibit V for tentative route.
- C. If water well is to be drilled on lease, so state. (No A.P.D. for water well necessary, however, unless it will penetrate potential hydrocarbon horizons.)
No water well will be drilled.

6. SOURCE OF CONSTRUCTION MATERIALS

- A. Describe where materials, such as sand, gravel, stone, and soil material, are to be obtained and used:

Construction of drilling pad and road will be from dirt in place. In the event of production, surfacing materials will be purchased from a commercial vendor in the area.

7. METHODS FOR HANDLING WASTE DISPOSAL

Describe methods and location of proposed containment and disposal of waste material, including:

- (1) Cuttings: to be contained in reserve pit.
- (2) Drilling fluids: to be contained in reserve pit.
- (3) Produced fluids (oil, water): produced oil will be contained in a test tank. Water will be drained into reserve pit during completion.

EXHIBIT "D" Cont.

Disposal of produced water will depend on amount & salinity as set forth on NTL-2B.

(4) Sewage: in sanitary pit.

(5) Garbage and other waste material (trash pits should be fenced with samll mesh wire to prevent wind scattering trash before being burned or buried.)

In burn pit, fenced w/checker wire to be burned (if allowed) and buried.

(6) Statement regarding proper cleanup of well site area when rig moves out:

The location will be kept free of trash during drilling and completion operations. All material will be hauled away or buried.

8. ANCILLARY FACILITIES

Identify all proposed camps and airstrips on a map as to their location, areas required, and construction methods. (Camp center and airstrip center lines to be staked on the ground.)

9. WELL SITE LAYOUT

A plat (not less than 1" = 50') showing:

(1) Cross Section of drill pad with cuts and fills:

See attached drawing - see Exhibit VI

(2) Location of mud tanks, reserve, burn and trash pits, pipe racks, living facilities, and soil material stockpiles:

See Exhibit VI, VII

(3) Rig orientation, parking areas, and access roads:

See Exhibit VII

- (4) Statement as to whether pits are to be lined or unlined;
(Approval as used in this section means field approval of location. All necessary staking facilities may be done at time of field inspection. A registered surveyor is not mandatory for such operations.)

Pits will be unlined.

10. PLANS FOR RESTORATION OF SURFACE

State restoration program upon completion of operations, including:

- (1) Backfilling, leveling, contouring, and waste disposal; segregation of spoils materials as needed:

Drill site will be backfilled and leveled as soon as possible after the drilling and completion rigs are moved out. All unused areas will be restored & reseeded. Waste material will be buried.

- (2) Revegetation and rehabilitation - including access roads (normally per BLM recommendations)

Top soil will be spread over unused areas, and reseeded to U. S. G. S. specs.

- (3) Prior to rig release, pits will be fenced and so maintained until cleanup:

Reserve pit will be fenced on three sides during drilling, and on fourth side after all equipment is out until pit is backfilled.

- (4) If oil on pit, remove oil or install overhead flagging:

Any oil on pit will be removed, or pit flagged.

- (5) Timetable for commencement and completion of rehabilitation operations:

Rehabilitation will commence as soon as possible. If wells are drilled during summer months, an attempt will be made to cleanup and reseed prior to winter.

11. OTHER INFORMATION

General description of:

- (1) Topography; soil characteristics, geologic features, flora and fauna: on site is nearly flat with soil of sandy loam. No distinguishing geologic features exist. The site vegetation is sagebrush and a few cedar trees. There exists evidence of deer and rabbits.

- (2) Other surface-use activities and surface ownership of all involved lands:
The current surface uses are range grazing and gas and oil field.

- (3) Proximity of water, occupied dwellings, archeological, historical, or cultural sites:
The only running water is in Nash Wash above Cunningham Ranch and they use all water for irrigation of hay fields. Calf Canyon $\frac{1}{4}$ mile west would be best described as an intermittent stream. The only occupied dwellings are at the Cunningham Ranch $1\frac{1}{4}$ mile S-SW of the site. No historical, archaeological or cultural sites were observed.

12. LESSEE'S OR OPERATOR'S REPRESENTATIVE

Include the name, address, and phone number of the lessee's or operator's field representative who is responsible for assuring compliance with the approved surface use and operations plan.

- (1) Mr. Roy Reeves
Suite 420, NBT Bldg.
320 S. Boston
Tulsa, Oklahoma 74103
Office: 918-587-2181
Home: 918-743-8630

- (2) Mr. Charles Simons
Suite 420, Nbt Bldg.
320 S. Boston
Tulsa, Oklahoma 74103
Office: 918-587-2181
Home: 918-371-5819

- (3) Mr. John Pulley
Flint Engineering & Construction Co.
324 Petroleum Bldg.
Billings, Montana 59101
Office: 406-245-4179
Home: 406-259-6156

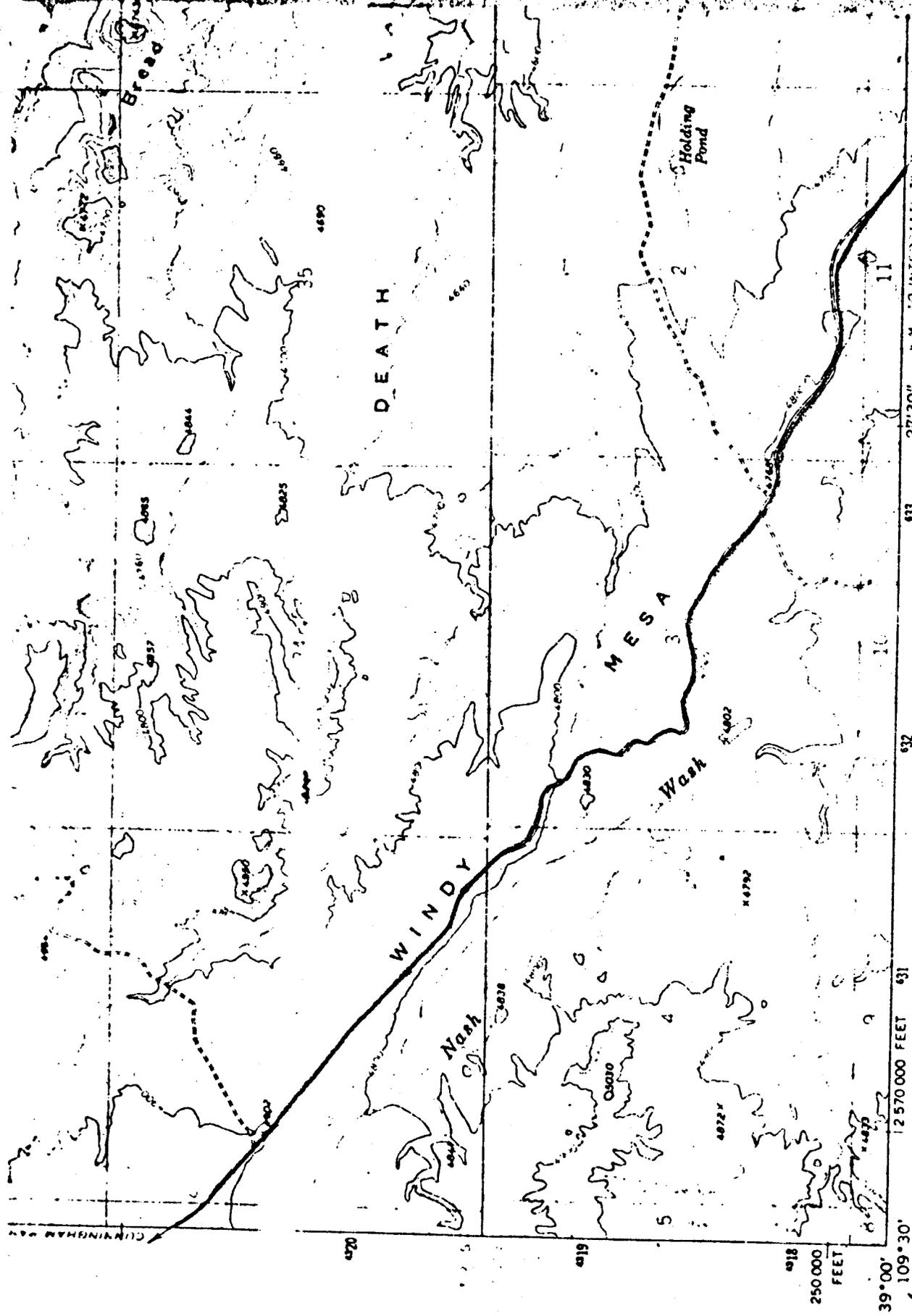
13. CERTIFICATION:

I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site 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 Dyco Petroleum Corporation and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

April 25, 1978

DATE

Charles h. Simmons
DYCO PETROLEUM CORPORATION



Mapped, edited, and published by the Geological Survey

Control by USGS and USC&GS

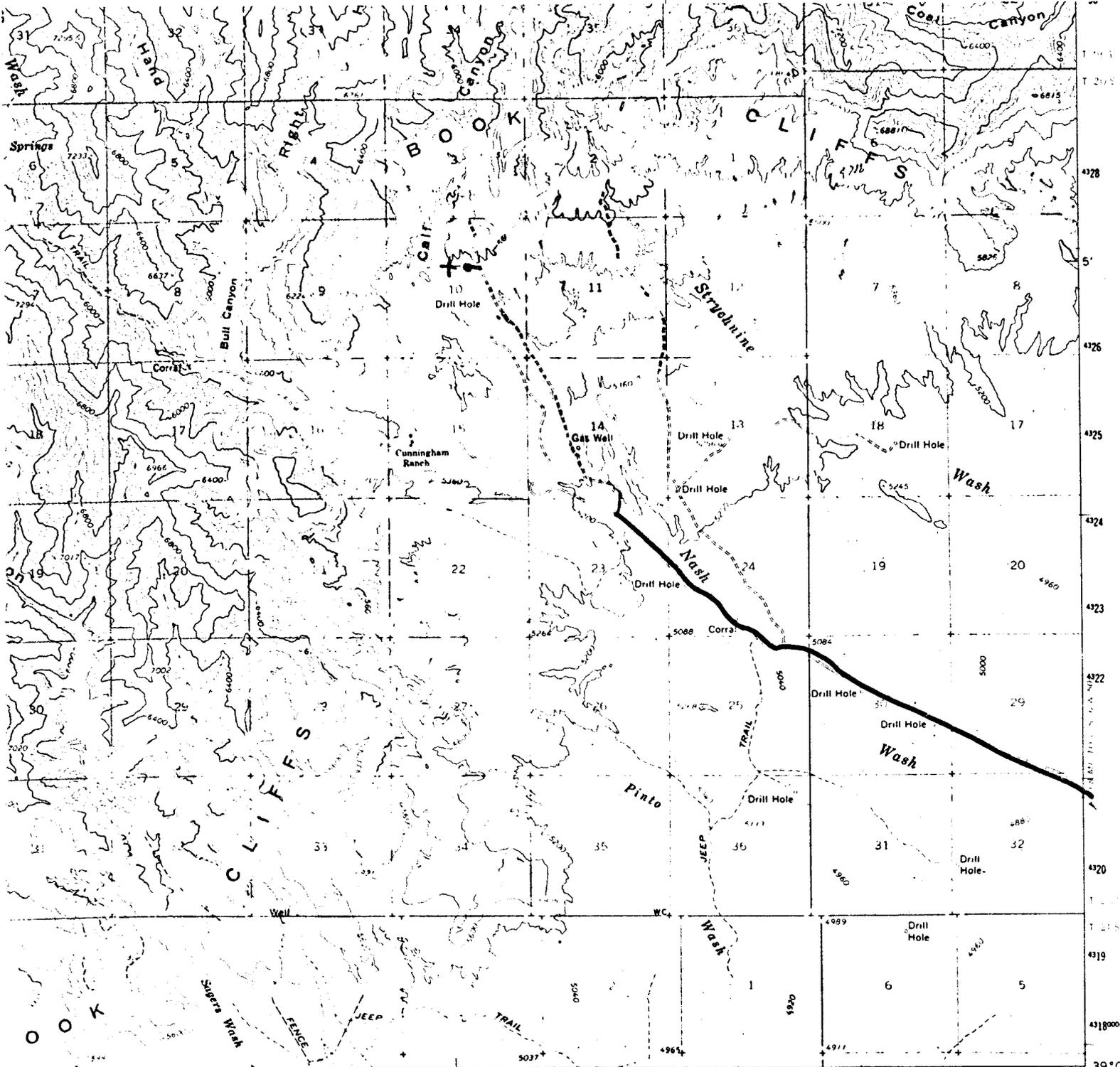
Topography by photogrammetric methods from aerial photographs taken 1969. Field checked 1970

Polyconic projection. 1927 North American datum
 10,000-foot grid based on Utah coordinate system, central zone
 1000-meter Universal Transverse Mercator grid ticks, zone 12, shown in blue

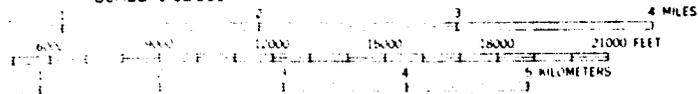
Fine red dashed lines indicate selected fence lines

SCALE
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 DATUM IS 7

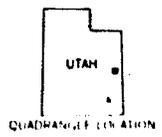
THOMPSON 1:62,500



(THOMPSON)
4061
SCALE 1:62500



CONTOUR INTERVAL 80 FEET
DOTTED LINES REPRESENT 40 FOOT CONTOURS
DATUM IS MEAN SEA LEVEL



INTERIOR-GEOLOGICAL SURVEY WASHINGTON D C - 1885-T
R 21 E R 22 E 4280000 E. 109° 30'

ROAD CLASSIFICATION
 Light-duty ————
 Unimproved dirt - - - -
 State Route ○

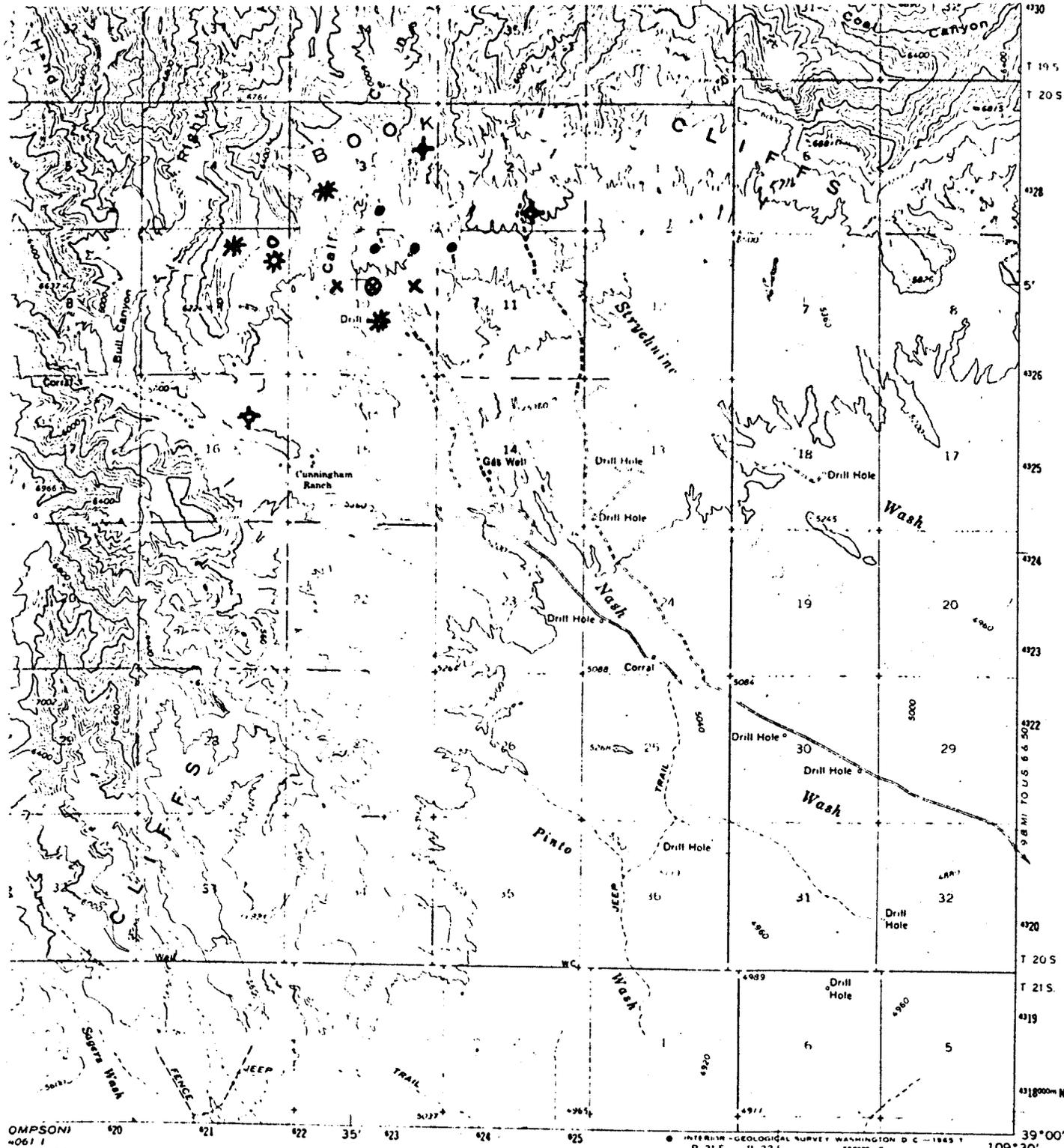
SEGO CANYON, UTAH
N3900—W10930/15

1963

AMS 4062 II—SERIES V797

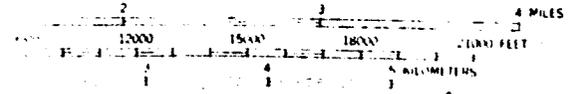
MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
 GEOLOGICAL SURVEY, DENVER 25, COLORADO OR WASHINGTON 25, D. C.
 PRINTING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

Exhibit II
Page 1



OMPSON
#061
1:62500

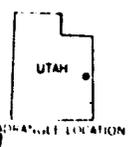
INTERIOR GEOLOGICAL SURVEY WASHINGTON D. C. - 1963
R 21 E R 22 E 628000m E 109° 30'



VERTICAL INTERVAL 80 FEET
HORIZONTAL INTERVAL 40 FEET
CONTOURS IN FEET FROM SEA LEVEL

US GEOLOGICAL SURVEY
MAP ACCURACY STANDARDS
FOR 25, COLORADO OR WASHINGTON 25, D. C.
FOR THIS MAP AND SYMBOLS IS AVAILABLE ON REQUEST

- Location
- Oil well
- * Gas well
- * Abandoned Gas well
- ⊕ dry hole
- x Dyco Locations.
- ⊙ Location noted in Application.



ROAD CLASSIFICATION
Light duty Unimproved dirt
○ State Route

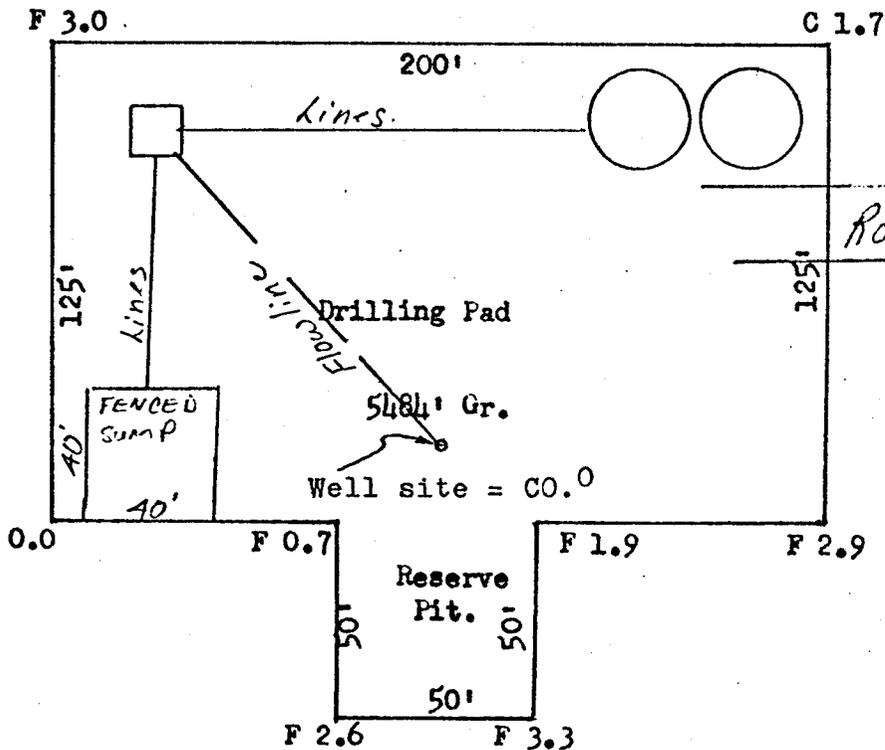
SEGO CANYON, UTAH
N 3900—W 10930/15

1963
AMS 4062 II—SERIES V797

Exhibit III

TOPOGRAPHIC MAP

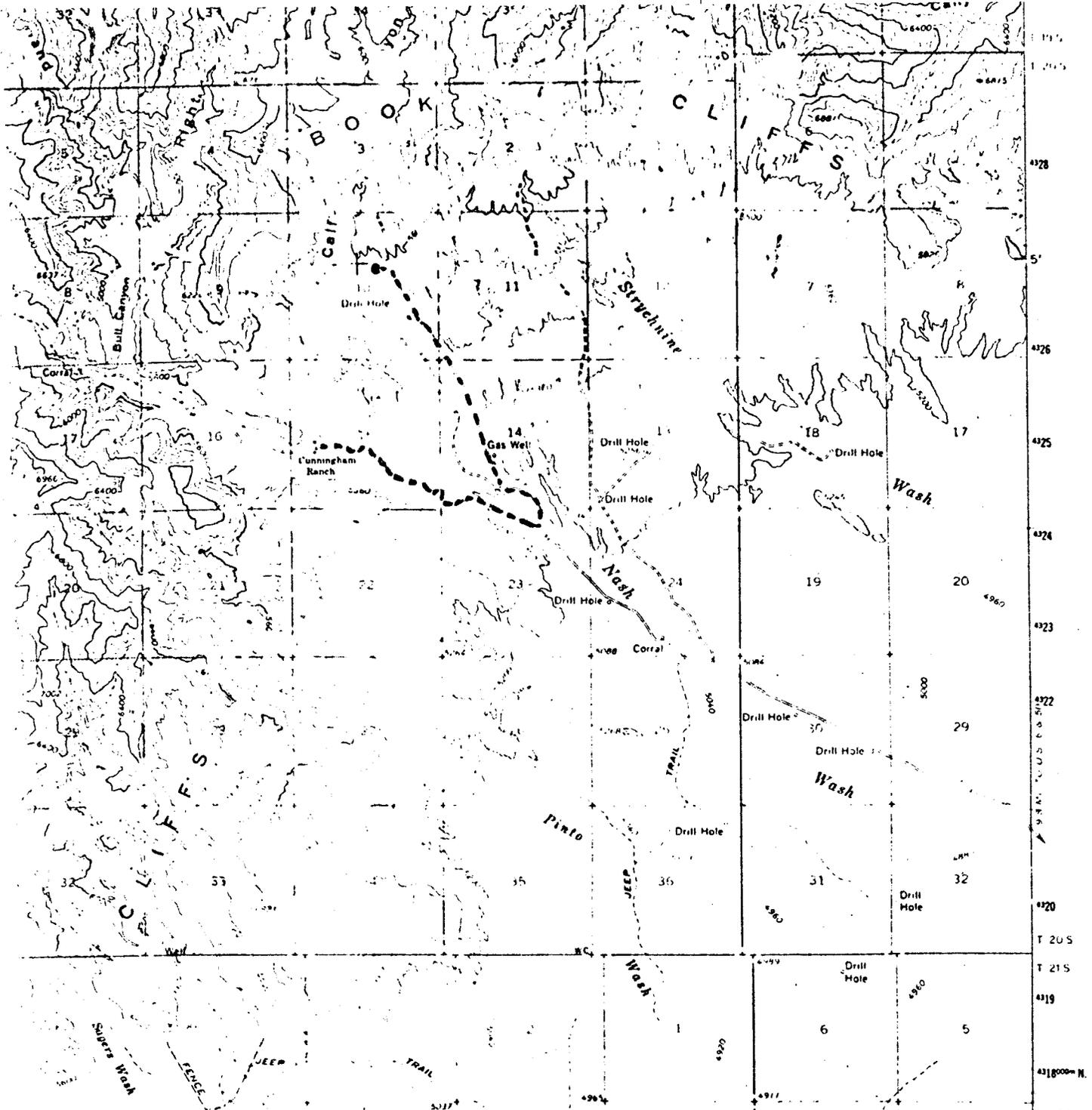
Dyco Petroleum Corp.
#2 Cisco
2050'FN & 1890'FB 10-20S-21E
Grand County, Utah



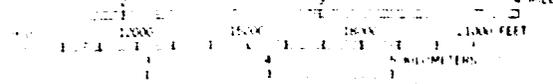
Scale: 1" = 50'

by: *Leonard Clamma*
Powers Elevation Company, Inc.

Exhibit IV

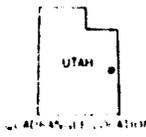


OMPSONI
-0611
: 62500



INTERVAL 80 FEET
CONTOUR 40 FOOT
FROM SEA LEVEL

CONFORMS TO NATIONAL MAP ACCURACY STANDARDS
FOR THE UNITED STATES OF AMERICA
AS OF JANUARY 25, 1983. COLORADO OR WASHINGTON 25. D. C.
FOR MORE INFORMATION IS AVAILABLE ON REQUEST



INTERIOR GEOLOGICAL SURVEY WASHINGTON D. C. 20508
R 21 E R 22 E 628000 E

ROAD CLASSIFICATION

- Light duty
- Unimproved dirt
- State Route

SEGO CANYON, UTAH
N3900—W10930/15

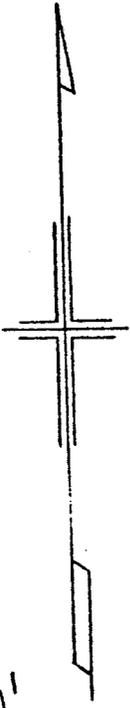
1963

AMS 4062 II—SERIES V797

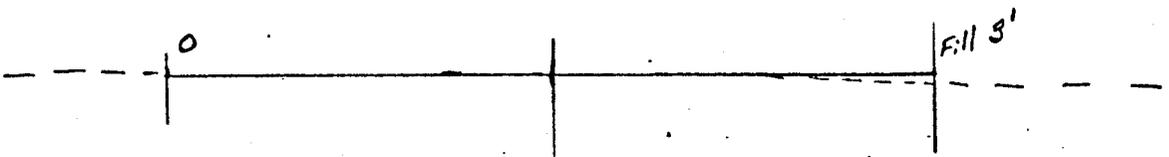
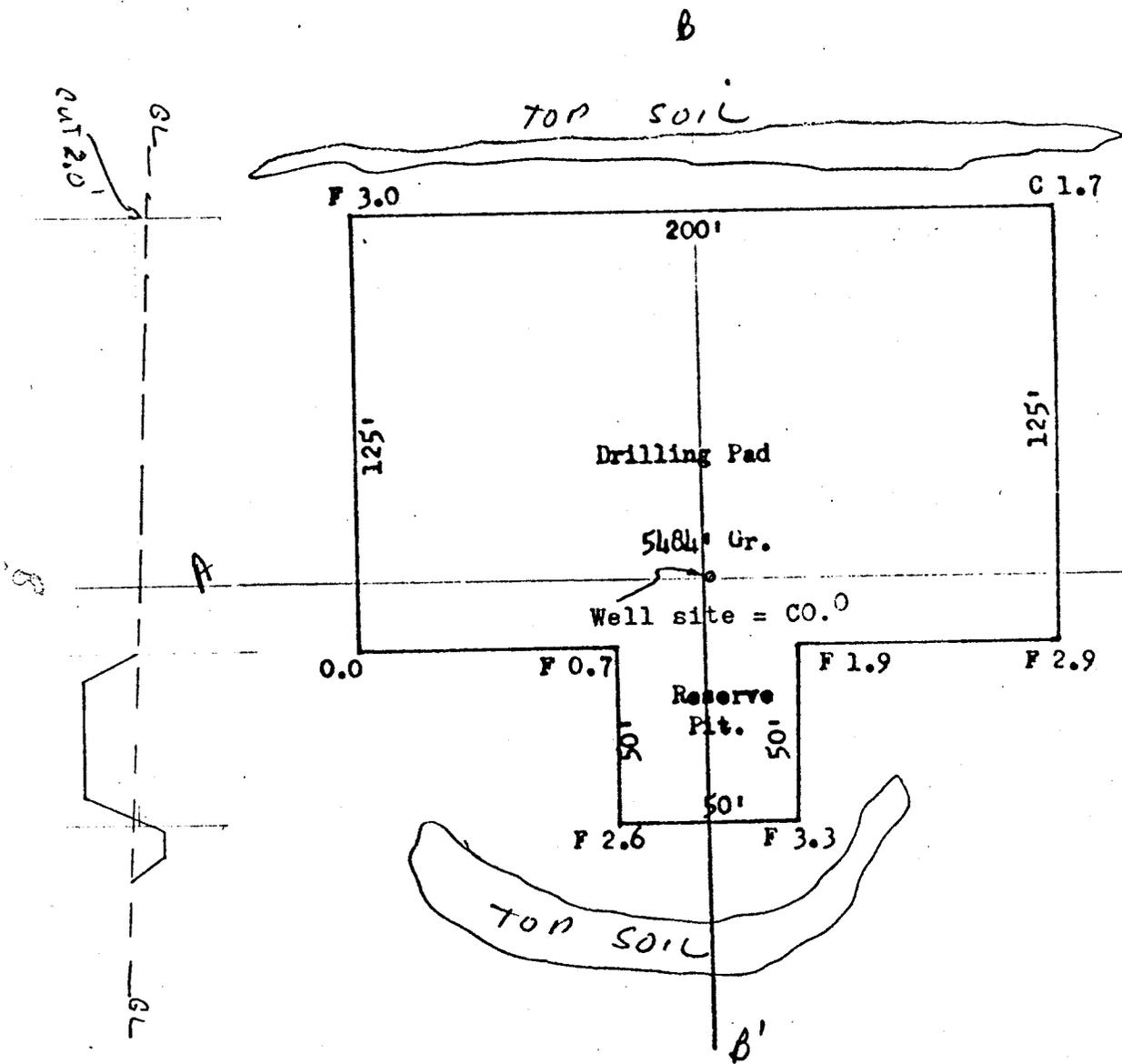
Exhibit IV

TOPOGRAPHIC MAP

Dyco Petroleum Corp.
#2 Cisco
2050' FM & 1890' FE 10-20S-21E
Grand County, Utah



Scale: 1" = 50'



by: *Leonard Powers*
Powers Elevation Company, Inc.

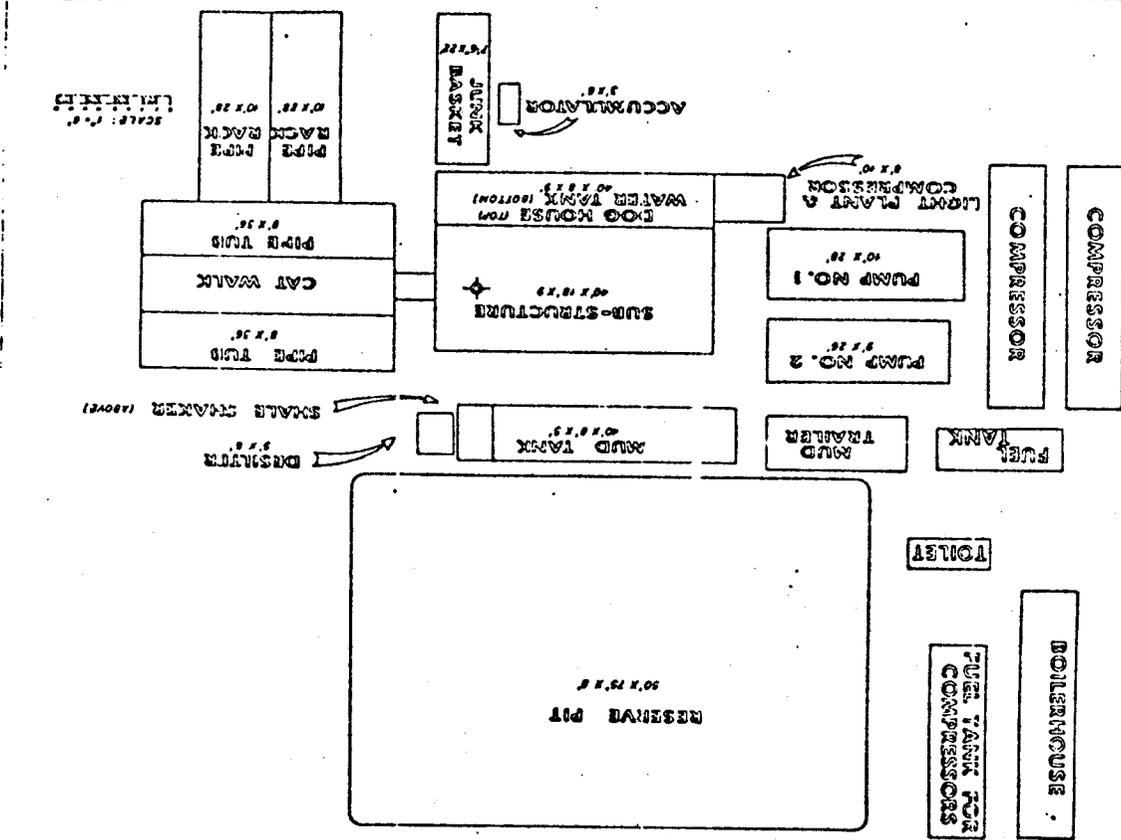
Exhibit VI

200'

ROAD

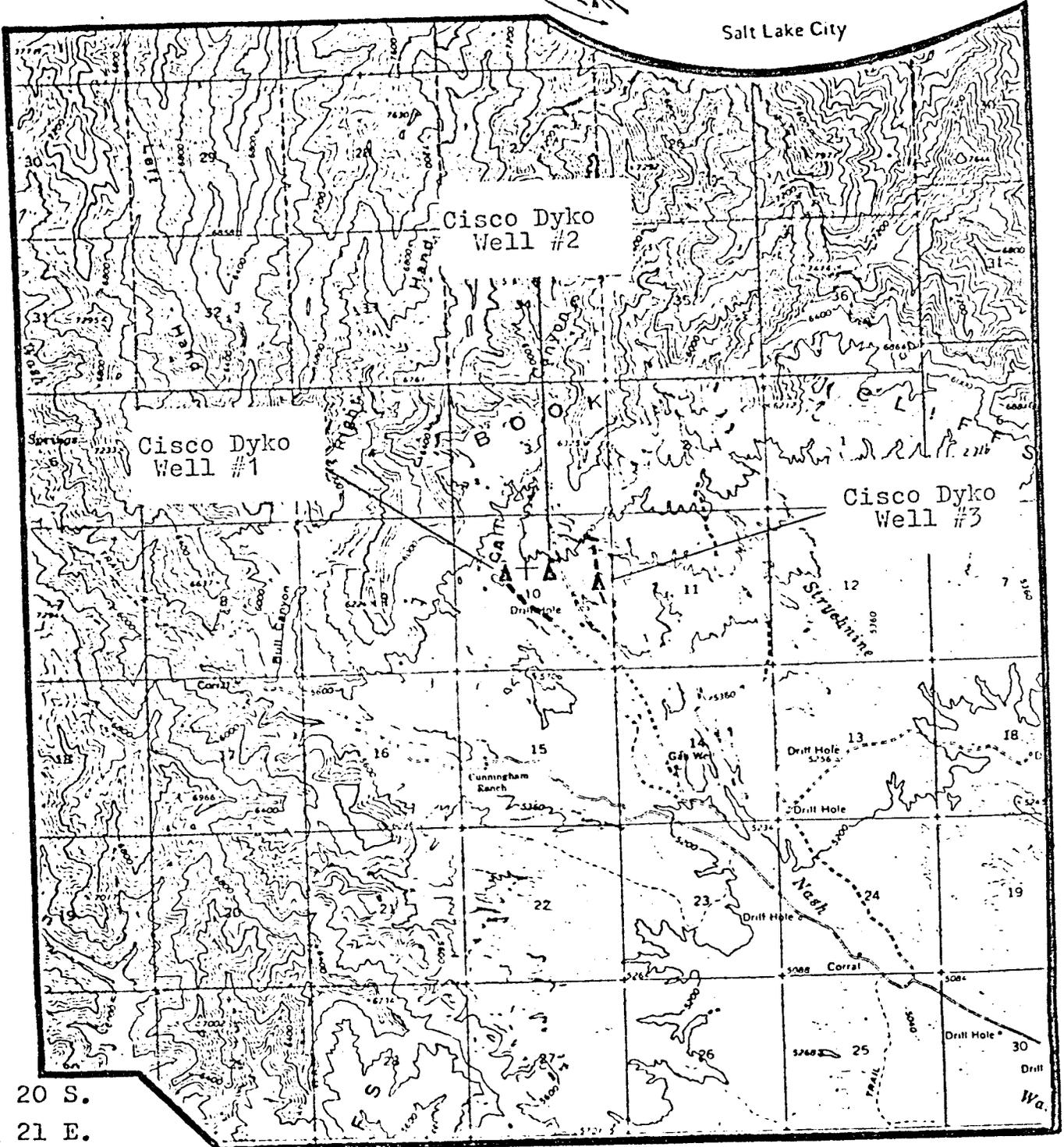
200'

200'





Salt Lake City



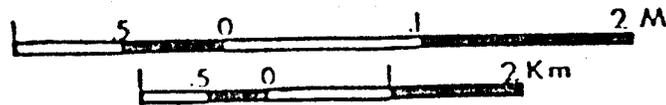
T. 20 S.
R. 21 E.

Meridian: Salt Lake B & M

Quad: Sego Canyon
15' Series

Project: PEC-78-1	Proposed Oil Well Sites in the Nash Wash Locality of Grand County, Utah
Series: East Central Utah	
Date: 3-28-78	

Legend: Drill Pad ▲
Proposed road - - - -



FIGURE

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Moab District Office

Summary Report of
Inspection for Cultural Resources

BLM Use Only: Use Initials.

C File No.

Report Acceptable Yes ___ No ___

Mitigation Acceptable Yes ___ No ___

Comments: _____

1. Project Name, Developer
Powers Elevate Company for Cisco Dyco Petroleum Company (Cisco
Dyco Wells #1, 2, and 3) (PEC-78-1)

2. Legal Description of Project Area (Attach Map Also)
Township 20 South, Range 21 East, Section 10

3. Institution Holding Antiquities
NA (no antiquities collected)

4. Antiquities Permit No.
78-Ut-014 (M-9)

5. Dates of Field Work
3-23-78

6. Description of Examination Procedures
Ten meter wide transects were walked across the drill locations
which averaged ca. 75 meters by 75 meters, and along the three access
routes in a search for cultural remains and indications of both pre-
historic and historic occupations.

7. Description of Findings (Attach forms or detailed report, if appropriate)
No cultural resources were observed during the survey.

8. Actual/Potential National Register Properties Affected
No national register properties will be adversely affected by the
drilling project.

9. Conclusions/Recommendations 1. All vehicle traffic, personnel movement,
and construction be confined to the locations examined and to access roads
leading into the locations; 2. all personnel refrain from collecting
individual artifacts or from disturbing any cultural resources in the area
and 3. a qualified archeologist be consulted should cultural remains from
subsurface deposits be exposed during construction work or if the need
arises to relocate or otherwise alter the drill pad location.

10. Signature of Person in Direct Charge of Field Work

I. R. Hank

11. Signature of Title of Institutional Officer Responsible

I. R. Hank

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

5. Lease Designation and Serial No.
U-38359

6. If Indian, Allottee or Tribe Name

7. Unit Agreement Name

8. Farm or Lease Name

Cisco - Federal

9. Well No.

2

10. Field and Pool, or Wildcat

CISCO DOME

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

Sec 10-T20S-R21E

12. County or Parrish 13. State

Grand Utah

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work

DRILL

DEEPEN

PLUG BACK

b. Type of Well

Oil Well

Gas Well

Other

Single Zone

Multiple Zone

2. Name of Operator

DYCO PETROLEUM CORPORATION

3. Address of Operator

420 NBT Bdg., 320 S. Boston, Tulsa, Oklahoma 74103

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

At surface

2050' FN & 1890' FE

SW NE

At proposed prod. zone

NA

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

18.8 N-NW of Cisco, Utah

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

1890'

16. No. of acres in lease

120

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.

1320' + south

19. Proposed depth

3500

20. Rotary or cable tools

Rotary

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

5484' Ground

22. Approx. date work will start*

July 10, 1978

23. PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
12 1/4"	8-5/8"	24	350	To Surface
4 1/2"	4 1/2"	10.5	3500	Across Pay

This well is on Federal lease, see attached plans for drilling and completing.



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 Charles L. Simons Title Area Engineer Date 4-26-78

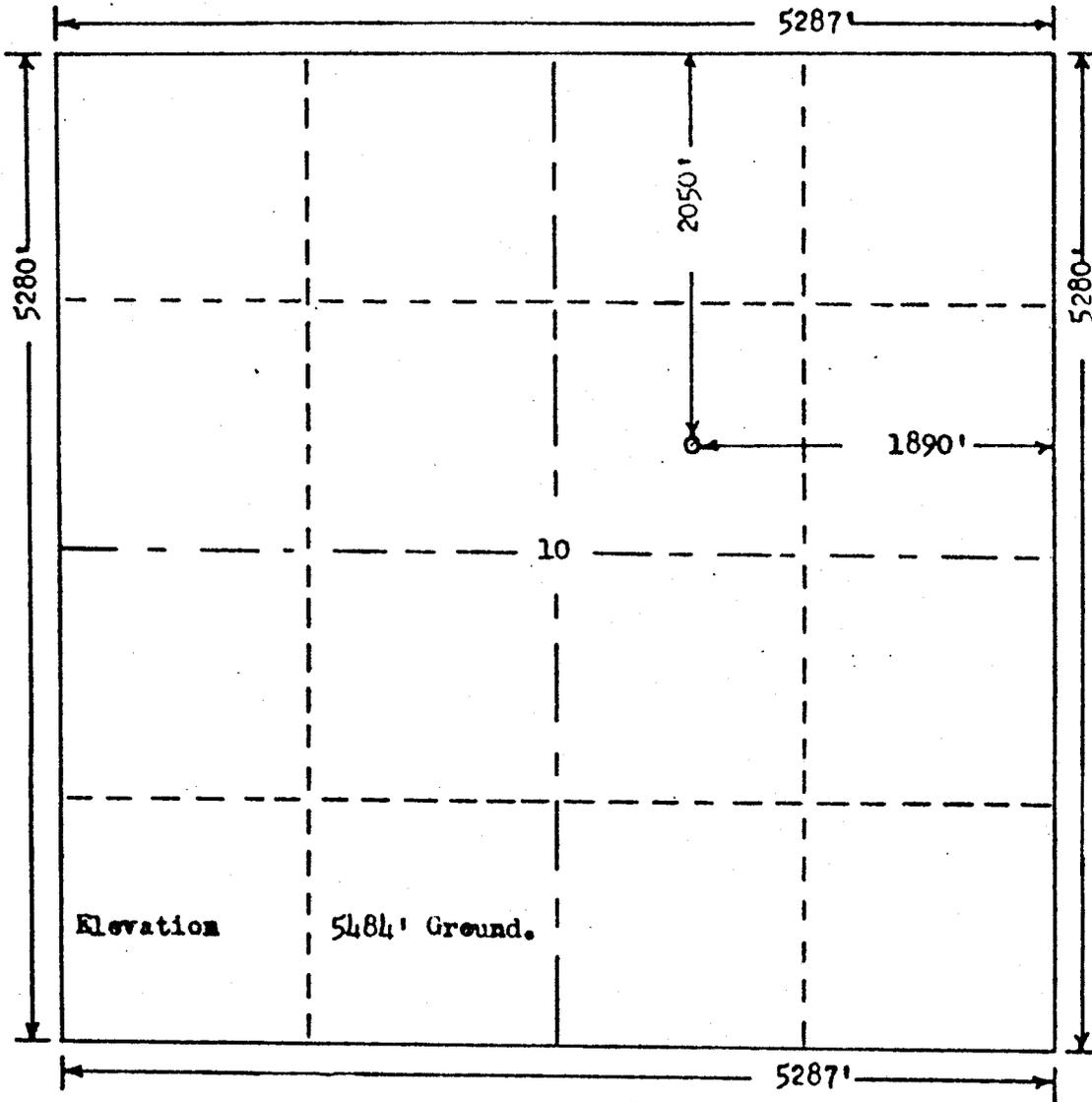
(This space for Federal or State office use)

Permit No. 43-119-30438 Approval Date

Approved by _____ Title _____ Date _____
Conditions of approval, if any:



R. 21 E.



T. 20 S.

Scale... 1" = 1000'

Powers Elevation Company, Inc. of Denver, Colorado
 has in accordance with a request from Jackie
 for Dyce Petroleum Corporation
 determined the location of #2 Cisco
 to be 2050' FN & 1890' FE Section 10 Township 20 S.
 Range 21 E. of the Salt Lake Principal Meridian
 Grand County, Utah

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

#2 Cisco

Date: 3-15-78

T. L. L. L.
 Licensed Land Surveyor No. 2711
 State of Utah

Exhibit I

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

** FILE NOTATIONS **

Date: May 2, 1978
Operator: Dyco Petroleum
Well No: D.C. Federal - # 2
Location: Sec. 10 T. 20S R. 21E County: Grand

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

API NUMBER: 43-019-30438

CHECKED BY:

Administrative Assistant [Signature]

Remarks: [Signature]

Petroleum Engineer [Signature]

Remarks: [Signature]

Director [Signature]

Remarks: [Signature]

INCLUDE WITHIN APPROVAL LETTER:

Bond Required: Survey Plat Required:

Order No. 102-82 Surface Casing Change
to _____

Rule C-3(e), 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

May 4, 1978

Dyco Petroleum Corporation
420 NBT Building
320 S. Boston
Tulsa, Oklahoma 74103

Re: Well No. Cisco Federal #1,
Sec. 10, T. 20 S, R. 21 E,
Well No. Cisco Federal #2, ✓
Sec. 10, T. 20 S, R. 21 E,
Well No. Cisco Federal #3,
Sec. 10, T. 20 S, R. 21 E,
Grand County, Utah

Gentlemen:

Insofar as this office is concerned, approval to drill the above referred to well is hereby granted in accordance with the Order issued in Cause No. 102-12.

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: #1: 43-019-30437;
#2: 43-019-30438; #3: 43-019-30439.

Very truly yours,

CLEON B. FEIGHT
Director

FROM: District Geologist Salt Lake City, Utah

TO: District Engineer, Salt Lake City, Utah

Lease No. 6-38359

SUBJECT: APD supplemental stipulations

Operator: Dyco Petroleum Location:

Corporation

SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 10 T. 20S, R. 21E

Well: 2

Grand Co., Utah

1. Operator picked tops are adequate? Yes , No . If not: The following are estimated tops of important geologic markers:

Formation	Depth	Formation	Depth
-----------	-------	-----------	-------

2. Fresh water aquifers likely to be present below surface casing? Yes , No . If yes: Surface casing program may require adjustment for protection of fresh water aquifers to a depth of approximately _____ feet in the _____ Formation.

Thin lenticular sandstones in the Mancos Shale may contain useable (?) water at depths of less than 500'.

3. Does operator note all prospectively valuable oil and gas horizons? Yes , No . If not: The following additional horizons will be adequately logged for hydrocarbons:

Unit	Depth	Unit	Depth
------	-------	------	-------

4. Any other leasable minerals present? Yes , No . If yes: 1. Logs (_____ *) will be run through the _____ ** at approximate depths of _____ to _____ feet to adequately locate and identify anticipated _____ beds. 2. Logs (_____ *) will be run through the _____ ** at approximate depths of _____ to _____ feet to adequately locate and identify anticipated _____ beds. 3. Logs (_____ *) will be run through the _____ ** at approximate depths of _____ to _____ feet to adequately locate and identify anticipated _____ beds.

5. Any potential problems that should be brought to operators attention (e.g. abnormal temperature, pressure, incompetent beds, H₂S)? Yes , No . If yes, what?

6. References and remarks: *Water Report # 83*

* From 10 pt or others as necessary. ** Members, Formations.

Date: 5/18/78

Signed: Candace C. Clark

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 MULTIPLE ZONE

2. NAME OF OPERATOR
 DYCO PETROLEUM CORPORATION

3. ADDRESS OF OPERATOR
 420 NBT Bldg., 320 S. Boston, Tulsa, Oklahoma 74103

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
 At surface 2050' FN & 1890' FE
 At proposed prod. zone N/A

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 18.8 N-NW of Cisco, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)
 1890'

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
 1320' + south

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 5484' Ground

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8-5/8"	24	350	To surface
4 1/2"	4 1/2"	10.5	3500	Across pay

1. Drill 12 1/4" hole to + 350', set 8-5/8" csg, cement to surface.
2. Drill 7-7/8" hole to 3500'.
3. Run 4 1/2" csg if productive.
4. P&A per U. S. G. S. instructions if dry hole.

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

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 Charles L. Simon TITLE Area Engineer DATE 4-25-78

(This space for Federal or State office use)

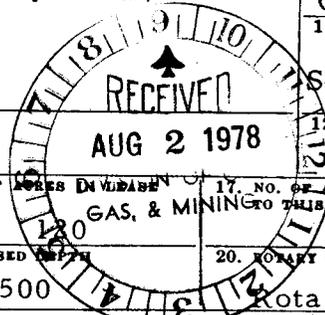
PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY ORIG. SGP. W. P. MARTENS TITLE ACTING DISTRICT ENGINEER DATE JUL 31 1978

CONDITIONS OF APPROVAL, IF ANY:

CONDITIONS OF APPROVAL, IF ANY: *See Instructions On Reverse Side

NECESSARY CLASSING OF THIS DOCUMENT



5. LEASE DESIGNATION AND SERIAL NO.
 U-38359

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
 Cisco - Federal

9. WELL NO.
 2

10. FIELD AND POOL, OR WILDCAT
 CISCO DOME

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 Sec 10 T20S R21E

12. COUNTY OR PARISH
 Grand

13. STATE
 Utah

16. NO. OF ACRES IN VOLUME OF GAS & MINING TO THIS WELL
 40

17. NO. OF ACRES ASSIGNED TO THIS WELL
 40

20. ROTARY OR CABLE TOOLS
 Rotary

22. APPROX. DATE WORK WILL START*
 July 10, 1978

7

August 22, 1978

MEMO TO FILE

Re: Dyco Petroleum
Cisco Federal #2
Sec. 10, T.20S, R. 21E
Grand County, Utah

A call was received from Mr. Charles Simons, Dyco Petroleum relative to the above well. They had drilled with air to a total depth of 3,009' and twisted off. The top of the fish was at 1,260'. Attempted to recover fish with 4½" grapple and were unsuccessful in getting over the top of the fish. Rigged up a 4 3/8" grapple and started in. After putting 500' of pipe in, they dropped the string. The top of the second fish was at 690'. Went in with open ended drill pipe and screwed into the second fish; pulled string in two and recovered approximately 270'. Top of second fish is now at 960'. Upon orders from the U.S.G.S., Dyco mixed 150 sacks of cement and pumped down with heavy mud in order to cover the Dakota-Mancos interface at approximately 2,600'. Mixed and spotted another 150 sack plug on top of the second fish at 960'. Placed 100 sack plug half-in and half-out of the 9 5/8" surface pipe which is set at 385'. A 10 sack plug will be set at the surface and a dry-hole marker will be erected.

It is Dyco's intention to skid the rig 50' north and start the #1-A. All existing surface facilities will be reused.

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

PLD/lw
cc: U.S. Geological Survey

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

SUBMIT TRIPLICATE*
(Other instructions on reverse side)

9
7

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-38359
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 Dyco Petroleum Corporation		7. UNIT AGREEMENT NAME
3. ADDRESS OF OPERATOR 420 NBT Bldg., 320 S. Boston, Tulsa, Oklahoma 74103		8. FARM OR LEASE NAME Cisco - Federal
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 2050' FN & 1890' FE		9. WELL NO. 2
14. PERMIT NO.		10. FIELD AND POOL, OR WILDCAT Cisco Dome
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 5484 Ground		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 10-T20S-R21E
		12. COUNTY OR PARISH 13. STATE Grand 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>plugging</u>	
(Other) <input type="checkbox"/>		<small>(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)</small>	

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.)*

Following is a re-cap of our conversation 11:00 am DST, Friday, August 18, 1978: On Wednesday, August 16, @ about 11:15 am, a twist off occurred while drilling Cisco #2 @ 3009' w/air. Drill pipe was pulled and twist off was just below a tool joint of 1260'. An overshot fishing tool w/4 1/2" grapples was run on the drill pipe and a latch-on made. However, on a 60,000# pull the tool would slip off the 4 1/2" pipe. A trip was made and in going back in the hole with an overshot with 4-3/8" grapple, a connection was not made up and 570' of drill pipe was dropped in a dry hole, with the top of fish No. 2 @ 690'. Drill pipe was made up and tagged top of fish and screwed in. 270' of the second fish was recovered with the new top at 960'. A trip with a milling tool was made, followed by three trips, one with an overshot, one with a taper tap and one again with an overshot.

The contractor proceeded to plug the hole and skid the rig after a diligent attempt had been made to recover the drill pipe. A procedure was outlined by your office and work was performed by Dowell Cementing Company and Uranium Exploration Drilling Company as follows:

After a phone conversation between your office and Mr. John Keel with Uranium Exploration, it was agreed to pump 150 sacks of cement into the hole, followed by drilling mud. The amount of cement exceeded the volume required to fill the hole and cover the 2400' interval. Next a plug was set at 960', with a 150' plug, followed by a 100' plug from 400' (over)

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

SIGNED Charles L. Simon TITLE Area Engineer DATE 8/23/78

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Instructions

General: This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law 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.

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 17: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports 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, 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.

to 300'. (Surface pipe set @ 380') A 10 sack plug was set at the surface.

The above procedure was followed, and attached hereto are substantiating reports, which are presented as part of this report, for your files.

After a slight delay to assemble replacement equipment, drilling is now scheduled for the replacement well No. 2-A, to commence on September 8, 1978.

CEMENTING SERVICE REPORT

DW-456- PRINTED IN U.S.A.



TREATMENT NUMBER
15-72-03-4400

STAGE
LOWELL DISTRICT
DATE
Grand Junction 8/19/58

WELL NAME AND NO. **Cisco Feed #2**
LOCATION--POOL-FIELD **Sec T R**
FORMATION **Dakota Morrison**
DOWELL REPRESENTATIVE **R. Johnson**
COUNTY **Grand County**
STATE **Utah**

RIG NAME: **Uranium Exp. #48**
WELL DATA
HOLE SIZE **7 3/4** CASING OR LINER A B C D
DEPTH **3009** SIZE-WEIGHT
 ROT CABLE TOP
BHST BOTTOM
BHLT GRADE & THREAD
BHCT CAPACITY

NAME **Uranium Exploration Inc**
AND **P.O. Box 398**
ADDRESS **Moab Ut.**
ZIP CODE

MUD: TYPE WT. VISC.
SHOE FLOAT TYPE DEPTH
STAGE TOOL TYPE DEPTH

SPECIAL INSTRUCTIONS
Mix & pump cement to plug well
1st plug - Mix & pump 160 sks
2nd plug 960-740
3rd plug 400-300
10 sks surface marker

TBG D.P. HEAD & PLUGS SQUEEZE JOB
SIZE DOUBLE SINGLE
WEIGHT SWAGE KNOCKOFF
GRADE NEW USED TOP R W
DEPTH BOT R W
CAPACITY OTHER

PRESSURE LIMIT PSI BUMP PLUG TO PSI MIN
 ROTATE RPM RECIPROCATE FT CENTRALIZERS NO

JOB SCHEDULED FOR TIME: **8:57 P** DATE: **8/19**
ARRIVED ON LOCATION TIME: **2:30** DATE: **8/19**
LEFT LOCATION TIME: **12:30** DATE: **8/19**

TIME	PRESSURE		VOLUME PUMPED	INJECT. RATE	SERVICE LOG DETAIL
	TBG. OR D.P.	CASING			
23:30					on location Rig Up Dowell
24:30					Safety Meeting
24:40			0	4	Pump 3 bbls Water & start Cement
			3	5-6	Mix & pump 32 bbls Slurry at 16 # gal
			35	3	Pump 2 bbls Water & Fill Hole with Mud
					Until Hole Full
11:30			0	4	Pump 5 bbls Water start Cement
			5	5-6	Mix & pump 45 sks at 15.8 lb/gal
			9	3	Displace with 7 bbls Water
			16	-	Shut Down Lay Down Drill Pipe
12:30			0	4	Pump 5 bbls Water & Start Cement
			5	5-6	Mix & pump 30 sks 15.8 lb/gal
			11	3	Displace with 2 bbls Water
			13		Shut Down Lay Down Drill Pipe
					Dump 10 sks for Surface Marker

REMARKS

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS		SLURRY MIXED	
					VOL.	WT.
1.	250	1.14	Class G		50	15.8
2.						
3.						

BREAKDOWN FLUID WT. SACKS MIXED **240** PUMPED **240** PRESSURE MAX: MIN:
 HESITATION SO. RUNNING SO. CIRCULATION LOST YES NO CEMENT CIRCULATED TO SURF. YES NO
 BREAKDOWN PSI FINAL PSI CEMENT LEFT IN PIPE: **None** FT
 WASHED THRU YES NO TO FT MEASURED DISPLACEMENT WIRELINE AS PLANNED UNAVOIDABLE
 TYPE OF WELL OIL STORAGE BRINE/WATER GAS INJECTION WILDCAT CUSTOMER REPRESENTATIVE DOES CUSTOMER CONSIDER SERVICE: SATISFACTORY UNSATISFACTORY UNKNOWN

ORAL APPROVAL TO PLUG AND ABANDON WELL

Operator Dyno Petroleum Co Representative Charlie Simmons
 Well No. Cisco #1 Located SE 1/4 NW 1/4 Sec. 10 Twp 20S Range 21E SLBEM
 Lease No. U-38359 Field Cisco Area / Grand Co State Utah
 Unit Name and Required Depth N/A Base of fresh water sands _____

T.D. 3009 Size hole and Fill Per Sack 7 7/8" Mud Weight and Top _____ #/gal. _____

Casing Size	Set At	Top of Cement	To Be Pulled	Plugging Requirements		
				From	To	Sacks Cement
<u>8 5/8"</u>	<u>385'</u>	<u>Sur</u>				

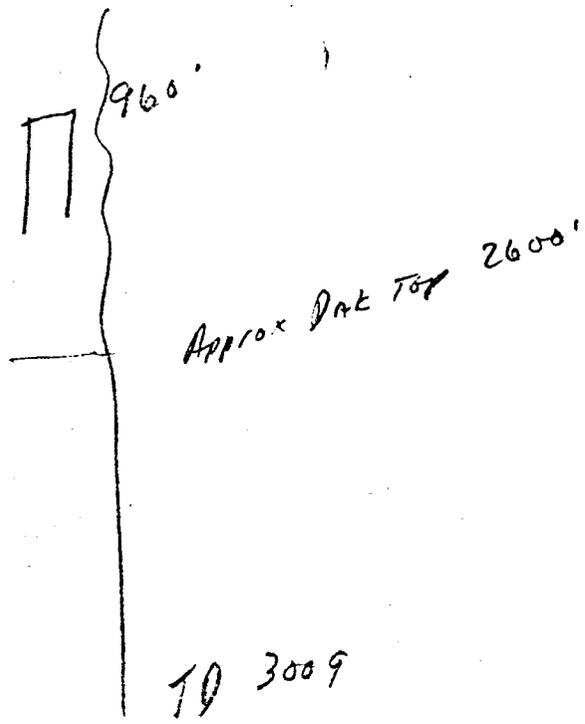
We would appreciate your review of the wellsite location and access road of the above described well. If there are surface disturbances which require special attention beyond the general Surface Restoration Requirements, please advise this office as soon as possible so that we may be sure the operator is aware of the problem(s).

District Engineer
 United States Geological Survey
 8426 Federal Building
 125 South State Street
 Salt Lake City, UT 84138
 PHONE: (801) + 524-5650

DST's, lost circulation zones, water zones, etc. Air Dets - Dold Sur whair
@ 73' encountered gravel bed - muddied up - 15' section - Twisted
off DP (4 1/2") @ 1260' - Caught w/ OS - Pump stopped - good air circ -
rolled off fish - broke below 200' - bit w/ 4 3/4" scraper - Esc card in fish
string - Pulled - 100' - 150' - 200' - 250' - 300' - 350' - 400' - 450' - 500' - 550' - 600' - 650' - 700' - 750' - 800' - 850' - 900' - 950' - 1000' - 1050' - 1100' - 1150' - 1200' - 1250' - 1300' - 1350' - 1400' - 1450' - 1500' - 1550' - 1600' - 1650' - 1700' - 1750' - 1800' - 1850' - 1900' - 1950' - 2000'
Pulled out to 950' - Top fish 2A @ 950' - Cannot catch - Box up - OS - Top Top -

Approved by E. H. [Signature] Date 8/18/78 Time 9:30

CC: Operator w/ Cond of Approval
 USGS, Vernal
 BLM, Moab
 mck
 Use Summary
 Central Bunker
 Wild File



Set Per 950'

1) Pump in hole
hole vol +15%
3009 - 2500'
followed 300ft cement
plug displaced to
Set @ 2700' - 2600'
followed 90 #/gal mud
to fill to sur.

2) Set ~~plug~~ cement plug
@ top fish 960'
960 - 800'

3) Set ~~plug~~ cement plug
400 - 300'

4) Plug @ surface

w/ no add sur disturbance
skid over 50-100' & re-drill

w/ Add sur disturbance
Provide SN w/ Supplement
to Sur Use

Plug back of side track hole
Plug back to 750
Set plug on fish

Plan No 23
actually performed:
John Keel + USGS
agreement.

Attached to and made a part hereof that certain
Sundry Notices and Reports on Wells
covering the Cisco Federal Well #2-A.

URANIUM EXPLORATION, INC.

324 SO. MAIN, SUITE 407 • TULSA, OKLAHOMA 74103

September 1, 1978

Mr. Charles Simons
Dyco Petroleum Corporation
420 NBT Building
320 South Boston
Tulsa, Oklahoma 74103

Re: Plugging of Cisco Federal
No. 2, Grand County, Utah

Dear Mr. Simons:

The purpose of this letter is to summarize the progression of events leading up to and including the plugging of the Cisco Federal No. Two.

The hole had been drilled with air to a depth of 3009 feet at which point we twisted off leaving the bit, 16 drill collars, and 42 joints of drill pipe in the hole. In our effort to recover the fish, the overshot, bumper-sub and 42 joints of drill pipe were dropped in the hole on top of the original fish. We recovered 32 joints of this no. 2 fish; the pipe was splintered, cork-screwed, and passed through itself from being dropped in this dry hole, and had compressed in excess of 120 feet. The hole was clean down to approximately 960 feet. We made repeated attempts at this depth to recover the remainder without success. At this point, we considered the hole un-salvageable and requested on Friday, August 18, 1978, your permission to plug.

In our next conversation, you relayed to me two plugging procedures you had received from Mr. Quinn with the United States Geological Survey in Salt Lake City, Utah. Procedure No. One involved establishing circulation from bottom, which, with our hole condition, was impossible. Procedure No. Two involved loading the hole with mud and bull-heading the bottom cement plug.

We discussed this job with Ralph Snow, an engineer with Dowell in Grand Junction, Colorado, and he thought, considering the hole condition, the bottom plug should be pumped before any mud was put in the hole.

At your suggestion, I spoke with Mr. Quinn at U.S.G.S. to get his approval of any changes we might want in the recommended plugging

P&A - Aug 19

Mr. Charles Simons
Dyco Petroleum Corporation
September 1, 1978
Page 2

procedure. The proposal which I discussed with Mr. Quinn was essentially the same as his recommended procedure No. Two, with a few minor changes, and is as follows:

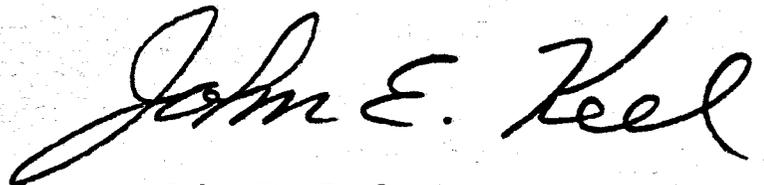
- Step No. 1: Bull-head approximately 150 sack bottom plug, which would be in excess of amount required to fill the hole from 3009 feet up to 2400 feet.
- Step No. 2: Follow with mud to surface.
- Step No. 3: Pick up drill pipe, run to top of fish at approximately 960 feet, spot 150 foot plug.
- Step No. 4: Spot 100 foot plug from 400 feet to 300 feet.
- Step No. 5: Ten sack plug at surface.

The job was performed on August 19, 1978, as proposed. The only problem incurred was in Step No. 2, which required mixing excess mud to load the hole.

I trust this will meet your immediate requirements. If you need additional information, please call on me.

Very truly yours,

URANIUM EXPLORATION, INC.



John E. Keel,
General Manager

JEK:kll