Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER — SINGLE ZONE [X] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: Union Oil Company of California

3. ADDRESS OF OPERATOR: P. O. Box 2620 - Casper, WY 86202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1936' FNL & 2079' FEL SW NE
At proposed prod. zone: Same as Surface

RECEIVED
NOV 19 1979
DIVISION OF OIL, GAS, & MINING

5. LEASE DESIGNATION AND SERIAL NO.: U-12111

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N.A.

7. UNIT AGREEMENT NAME: Brown's Peak Unit

8. FARM OR LEASE NAME: Federal

9. WELL NO.: 1-G24

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 24, T.11S., R.4E.

12. COUNTY OR PARISH: Utah

13. STATE: Utah

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 5.06 miles northeast of Indianola, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 561' to lease line; 6640' to unit line.

16. NO. OF ACRES IN LEASE: 1972.74

17. NO. OF ACRES ASSIGNED TO THIS WELL: 640 (18,010.71 Ac. Unit)

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

19. PROPOSED DEPTH: 10,000'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 7450' GR (Ungraded)

22. APPROX. DATE WORK WILL START*: 4-15-80

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
26"	20"	94#	60'	65 sx.
17-1/2"	13-3/8"	48#	350'	250 sx. (Cmt. to Circ)
12-1/4"	9-5/8"	36#/40#	5,600'	1250 sx.
8-3/4"	5-1/2"	15.5#/17#	T.D.	300 sx.

PROPOSED DRILLING PROGRAM:

Set 20" conductor casing in 26" hole with rat-hole machine. Cement with redi-mix concrete. Drill 17-1/2" hole to 350'. Run and cement 13-3/8" casing. Drill 12-1/4" hole to 5600'. Run and cement 9-5/8" casing. Drill 8-3/4" hole to T.D. at approximately 10,000'. Log, and if productive, run and cement 5-1/2" casing.

A double-gate BOP and annular preventer will be used. A choke manifold with an adjustable and a positive choke will also be used. The BOP and choke manifold will be pressure tested prior to drilling out cement and will be mechanically tested daily and each test will be logged on the IADC tour sheet.

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 R. G. Ladd, Jr. TITLE District Drilling Supt. DATE 11-16-79

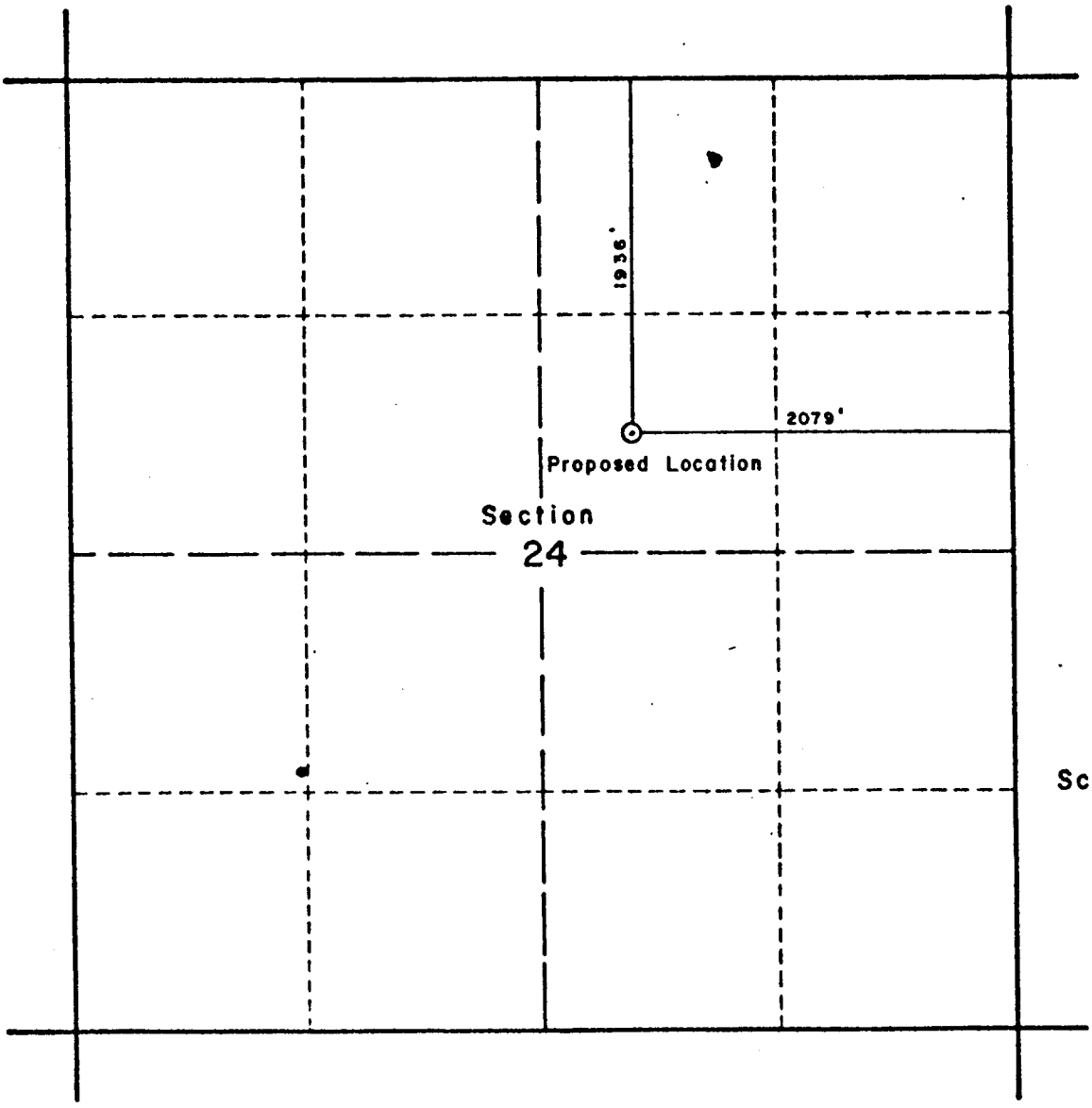
(This space for Federal or State office use)

PERMIT NO. 43-049-30009 APPROVAL DATE

APPROVED BY TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side



Scale: 1" = 1000'

WELL LOCATION: UNION OIL CO. OF CALIFORNIA - FEDERAL NO. 1 - G24

Located 1936 feet South of the North line and 2079 feet West of the East line of Section 24
Township 11 South, Range 4 East Salt Lake Base & Meridian
Utah County, Utah
Existing ground elevation determined at 7450 feet based on USGS Datum

I hereby certify the above plat represents a survey made under my supervision and that it is accurate to the best of my knowledge and belief

Frederick H Reed

FREDERICK H REED
Registered Land Surveyor

UNION OIL COMPANY Casper, Wyoming	
WELL LOCATION PLAT Federal No. 1 - G24 Sec. 24, T 11 S, R 4 E Utah County, Utah	
CLARK - REED & ASSOC. Durango, Colorado	DATE: OCT. 17, 1979 FILE NO: 79084

TABLE OF CONTENTS

I. INTRODUCTION

A. Need For a Decision

Union Oil Company of California proposes to drill a 10,000 foot exploratory well in Little Clear Creek Canyon. A flat area of 205 feet by 305 feet is required for the drill facilities. The company estimates it will take 150 days to drill the well to the desired depth. If drilling operations start August 15, 1980, they should be concluded by April 1981, thus drilling operations will continue through the winter months. A joint on-site inspection of the proposal by the Forest Service and U.S. Geological Survey was conducted by May 16, 1980.

Because of geologic considerations, Union Oil Company proposes to drill the well in the SE¼ of Section 24, T11S, R4E. This area is located in Utah County approximately 5 miles north and east of Indianola, Utah. Access to the area is from Development Road No. 50006. See the location and access map shown as Appendix 1 of this report.

The purposes of this Environmental Assessment are to determine the best location for the drill site, to select the least environmentally damaging way to create a level pad within the site, and to identify appropriate standards for road improvements to provide access to the site.

B. Issues, Concerns, and Opportunities

The interdisciplinary team reviewed the project on-the-ground with representatives of the U.S. Geological Survey and Union Oil Company. Based on this review and subsequent discussions with the public, the following issues, concerns, and opportunities were identified:

1. Access. The access road, Forest Development Road 50006, will need to be designed and reconstructed to satisfy potential oil and gas operations.

2. Visual Impacts. Some portions of the new access road that will need to be built and portions of the pad will be visible for a short distance from Forest Road 50006. The visual quality of the area could be permanently impaired without proper design and reclamation.

3. Pollutants. Sedimentation should not be a significant problem, however, during construction of the pad and reconstruction of the access road, there is a potential for materials to get into a stream. Further, during operations, there is a potential for chemicals or drill cuttings to get into the Clear Creek channel.

4. Stability of Disturbed Areas. Access road and pad development will create significant cuts and fills. The stabilization and reclamation of these cuts and fills may be a problem.

The ID team did not identify any archeologic, paleontologic, prime range or timber lands; threatened or endangered animals and plants; flood plains; alluvial valley floors; or RARE II further study areas within the project area. An archeological report by Archeological Environmental Research Corporation, and threatened and endangered plant and animal reports are available in the Sanpete Ranger District Office.

II. AFFECTED ENVIRONMENT

Union Oil holds leases on 18,010 acres in T11S, R4 and 5E, generally bisected by the Little Clear Creek Drainage. Within this lease area they have identified a geologic structure they wish to explore for oil and gas. The top of the geologic structure is located near the Little Clear Creek drainage in an area that is steep, highly dissected and covered with oakbrush with scattered patches of aspen. The road up Little Clear Creek, FR #50006, provides the only access to the center of the structure. Access and topography limit the number of areas sufficiently large enough on which to develop a drill pad.

The area is accessed by an existing Forest Development Road No. 50006, and Dairy Fork-Indianola Road. The road is a native surface (dirt) road with approximate width of 15 feet and numerous poorly delineated turnouts. The road climbs approximately six percent, but has numerous pitches. The steepest pitch is 14 percent. There are four sections with either severe or long sustained pitches that should be improved. The horizontal alignment is good, with most curves averaging 175 feet radius or larger.

The soil type is predominately silts and clays. The soil has poor support capabilities which is verified by the ruts resulting from use during wet periods. The soil tends to powder and results in dusting during dry periods. The combination of poor soils and frequent sustained grades of 7-8 percent results in high native surfacing losses.

Drainage is provided by outsloping the road and a combination of dips and cross-drains. The poor soils and frequent sustained grades of 7-8 percent result in high ditch erosion losses.

Several side drainages to the main creek cross the road in culverts. Many of these culverts become plugged rapidly after maintenance because they are located in or on small alluvial fan deposits. The change in velocity at the inlet combined with high sediment load causes plugging.

Subgrade stabilization is required throughout the length of road because of the poor support of the native soils (silts and clays). This stabilization will reduce dusting and provide for safer operation of water-hauling vehicles with other traffic. The required gravel structure must be verified but will approximate 12 inches of crushed aggregate for the soils and loading expected. By lowering grades and dispersal of drainages, sedimentation from the road should be lessened. Those sections with adequate cross slope below the road to the stream will be outsloped to disperse the water. The sections with inadequate cross slopes will be ditched and carried across in culverts. The spacing of culverts will be designed to prevent excessive concentration of water in ditches. Side drainage in alluvial fan will be drained with combination dips and culverts. If the culvert becomes clogged, the armored dip will carry the streams across and prevent the water from flowing down the road prism.

There are no alluvial valley floors, wilderness areas, further planning areas, flood plains, threatened or endangered plants or animals or known archeological sites on the drill site.

III. CRITERIA

A. Alternative Formulation Criteria

From the I.D. Team review and discussions with representatives, the following alternative formulation criteria was developed for the site:

1. The site must allow the well to be located on top of the targeted structure.

2. The site must meet the U.S. Geologic Survey regulations.

3. The site must provide adequate space in a situation where reclamation could be reasonably expected.

Criteria developed to determine management of the existing road area:

1. Must fit the terrain.

2. Must meet safety requirements.

3. Must meet standards for design.

4. Must facilitate completion of the remainder of the transportation system in the area.

5. Must meet the traffic requirements of the proposal explorations traffic and the possible future developmental traffic, plus existing and future Forest use.

6. Must provide lowest possible cost of transportation (lowest total for environmental, plus construction, plus maintenance, plus user).

B. Alternative Evaluation Criteria

1. The amount of area disturbed should be minimized. This would also include minimizing the height of cuts and fills.

2. The least amount of sediment should be put in the drainage.

3. The selected alternative should be the easiest to restore and revegetate.

4. The alternative selected should have the least residual impacts after restoration and revegetation.

IV. ALTERNATIVES

In this analysis the following alternatives are considered: (a) Three alternative drill sites, (b) Two alternative pad designs at the viable drill site, (c) The requirements for access road location, and (d) Two alternative spur road locations to provide access.

A. Drill Site Alternatives

These were flat areas adjacent to the existing road that would have been easier to gain access to, but were unacceptable to the oil company as they are not located on the target geology. The alternate sites were located one-fourth mile northeast of the proposed site and the other 1,000 feet west of the site. Due to the geology, these sites were not evaluated. This left only the proposed site for evaluation.

B. Pad Construction Alternatives

At the viable site, two pad alternatives were considered. They are described as follows:

1. Build the pad so as to maintain the integrity of the small oak covered ridge on the north edge of the proposed site. This would place the pad between the oak ridge and the small drainage to the south. This would require an 18-foot cut on the southeast corner, a 38-foot cut on the northeast corner, an 8-foot cut on the northwest corner with a 16- to 20-foot fill on the southwest corner. See well site plan attachment #7 to the application to drill shown in Appendix 2 of this report.

2. Build the pad to include the land area of the small oak covered ridge on the north side of the site.

   This alternative would move the pad west and north of the Alternative #1 location. This would greatly reduce the cuts on the east edge of the pad. The small ridge would be permanently removed and the material used for fill.

C. Access Route Alternatives

This discussion is broken into two parts as discussed below.

1. Road improvements standards on the existing Little Clear Creek Road #50006.

   a. Considered but not evaluated

      (1) Use existing Forest Development Road No. 50006 without improvements. This alternative was not evaluated because it would not be useable by truck traffic because of poor support of native soil.

      (2) Upgrade to a two-lane subgrade for possible development of production for oil or gas field. This alternative was not evaluated because predicted ADT for this alternative would be well below 100 ADT.

   b. Considered and evaluated

      Using existing Forest Development Road No. 50006 with improvements to vertical and horizontal alignments, and subgrade reinforcement.

      (1) Remove excessively steep pitches.

      (2) Remove excessively long pitches.

      (3) Outslope for drainage where water is led away from road and dispersed by natural ground slope.

      (4) Inslope and ditch for drainage where water is held in road and concentrated by natural ground slope. Carry water in ditches and cross road with culverts.

      (5) Provide for crossing side drainages at alluvial fans with armored dips which includes 18-inch cmp for low flows.

(6) Provide adequate number and spaced turnouts for safe operation of trucks and recreation vehicles.

(7) Increase the support capabilities by overlaying poor subgrade with an aggregate layer of sufficient depth. Select an aggregate source that will decrease dusting during dry periods, or design an additive to control dusting.

2. Location of new access road from Road #50006 to pad location.

The pad location is approximately 1,000 feet east of the existing road, requiring a short section of new road to be built. In the application submitted by Union Oil Company, they planned to construct the spur road up the small drainage west of the site. Engineering evaluations show that this road would have pitches near 18 percent and would not meet the alternative formulation criteria.

When this road was determined to be too steep, an alternate route was located that would provide the access. This road would leave Forest Road #50006 approximately 1,300 feet north of the small draw mentioned above. The road location has been surveyed and will provide access with 5 to 8 percent grades.

D. Management Requirements and Constraints

The following management requirements and constraints would apply to all alternatives for drill pad construction and the access roads to the viable site:

1. If H_2S is expected to be encountered, the operator must file a contingency plan with the U.S. Geological Survey. This contingency plan must be approved by the U.S. Geological Survey prior to drilling operations or prior to penetration of the potential H_2S horizon.

2. The grade on the side cut slopes will be 1½:1 and on fill slopes 1½:1. If bedrock is encountered, slope grades may be modified with Forest Service approval.

3. Vegetation removed at the pad site and spur road clearing will be disposed of in the following manner:

   a. Aspen, oakbrush and maple will be cut up and hauled off the Forest.

   b. No piling will be permitted unless approved in advance by the Sanpete District Ranger.

4. Chemical toilets, or equivalent, will be provided for drill crews during the operation. No sewage will be deposited on the National Forest.

5. Permittee will provide adequate fire suppression tools and equipment to ensure that immediate and proper action is taken should a wildfire occur.

6. All activities will be confined to the well site or on specified roads unless approved in advance by Forest Service.

7. No on-site burning will be permitted.

8. All garbage, debris, etc., will be hauled from the National Forest for disposal.

9. Signs indicating the presence of heavy equipment will be located at a site near Indianola and at the Little Clear Creek-Lake Fork summit.

10. The available topsoil will be stripped prior to site construction and stored on an acceptable location.

11. Reserve pit will be fenced on three sides during drilling.

12. If the site does not go to production, the site and spur road will be restored as follows:

    a. Remove the gravel to natural material.

    b. The road and disturbed areas of the site will be scarified and the road will be outsloped, drainage constructed.

    c. Replace topsoil on the site and road.

    d. Drill seed flat areas and hydro seed cut and fill slopes with the following seed mixture:

(1)	Smooth brome	2 lb./ac.
(2)	Timothy	2 lb./ac.
(3)	Crested wheatgrass	2 lb./ac.
(4)	Ladak alfalfa	5 lb./ac.
(5)	Kentucky blue	3 lb./ac.
(6)	Intermediate wheat-grass	2 lb./ac.

    e. Drainage will be reestablished and temporary measures will be required to prevent erosion to the site and access road until vegetation is established.

f. Fence the area to protect from livestock use for two growing seasons to allow for vegetation establishment.

g. Mud pits will be allowed to dry or fluids that will not dry must be removed from the Forest. All polluting substances or contaminated materials, such as oil, oil saturated soils and gravel will be buried with a minimum of 2 feet of clean soil as cover or be removed from the Forest.

If the site goes to production, the above steps will be taken on all site areas not needed for the production phase.

13. Cut and fill areas along the existing road will be hydro-seeded with the above seed mixture.

14. Keep sediment and debris additions in the drainage to the minimum.

15. As necessary, close the road for public safety during the construction phase. The road must be open and construction can occur during elk and deer hunting seasons, as specified by the Sanpete District Forest Ranger.

16. Gravel stripped from the site and spur road can be spread on the roadway up-canyon from the site.

17. Some specific on-site decisions will need to be made when the rehabilitation is being done. These will be joint decisions between the oil company and the Forest Service.

18. Roadway and drill site embankments will be compacted to 95 percent of AASHTO T-99.

19. Aggregate surfacing requirements for the road and drill site will be determined by or under the direction of a registered professional engineer and submitted to the Forest Service for approval prior to placement.

20. Drill site grading, drainage, and surface drawings, plans, and specifications will be submitted to the Forest Service for approval prior to initiating construction. Provide drainage from the pad area. Construct eyebrow ditch to divert natural water around site. Construct a berm to contain water falling on the pad.

21. In the event of a discovery and producing well, a separate surface use and operation plan will be required covering any additional facilities. A pipeline would probably be tied into the nearest available line, which is approximately 25 miles southwest of the drill site. The stipulations and constraints for action will require a separate EA.

22. No changes in the road or pad construction design, or in the permit can be made without the written approval of the Forest Supervisor.

23. A "road use permit" will be issued to authorize construction and use of the Forest Development Road. This permit will be secured after all construction plans have been approved.

24. Replace clogged culverts located on alluvial fans with a combination of armored dip with culverts. The site plan, dip drawings and material specifications are to be submitted to the Forest Service for approval prior to initiating construction.

25. Grade modifications to correct (1) short steep pitches - Station 20+00 to 31+00, (2) short steep pitches - Station 74+00 to 82+00, (3) long sustained grade - Station 104+00 to 112+00, and (4) long steep pitch - Station 144+00 to 158+00.

V. EFFECTS OF IMPLEMENTATION

Alternative #1

This alternative would result in some severe cuts in the east and north edges of the pad which would require long layback areas to stabilize. The layback areas of from 75-100 feet would expose a great deal of bare soil to erosive forces.

This alternative would require a road cut through the oak ridge to provide access to the site. By maintaining the oak ridge the access road cut is the only visual impact.

The bare surface area and activity close to the small drainage to the south could cause considerable sediment to be transported to Little Clear Creek.

The 38-foot cut in the northeast corner in a slumpy area could cause a failure of the upslope resulting in a landslide onto the pad. The largest bare areas from this will be south and west facing slopes that are more difficult to rehabilitate thus would have the potential to produce more sediment.

Alternative #2

This alternative would eliminate the cut on the southeast corner of the pad site and reduce the cut on the northeast corner to about one-half that in Alternative #1. The amount of area that would be laid back would be reduced by one-half or more.

Removing the ridge would eliminate the south facing slope rehabilitation problems.

Access to this site would be the same as Alternative #1 except that the cut through the ridge would be eliminated as the ridge would be removed.

The entire pad may be visible for a short distance on road #50006 above the spur road turnoff, however, with reclamation, the change in color line and form may be more acceptable than the artificial notch caused by the access road cutting through the ridge as it would be under Alternative #1.

By reducing the cuts and resultant bare soil layback area and by staying out of the small south edge drainage, the potential for sediment reaching Little Clear Creek is reduced. The reduction of the cuts and by eliminating the south facing slope, rehabilitation will be more successful thus further reducing sediment potential to the drainage. Also by reducing the cuts, the residual banks will be more stable and less subject to slumping.

VI. EVALUATION OF ALTERNATIVES

The alternatives are weighed against the evaluation criteria using a scale of 1 to 10 with 1 least meeting the criteria and 10 most nearly meeting the criteria.

Evaluation Criteria	Alternative Pads 2	Alternative Pads 1
1. Area Disturbed	10	7
2. Sedimentation	10	5
3. Restoration	3	5
4. Residual Impacts	3	5

VII. IDENTIFICATION OF THE PREFERRED ALTERNATIVE

As a result of the application of the alternative formulation criteria, the optimum pad to construct within this site is Alternative #2. It is the least damaging to the site, and provides the least opportunity for sedimentation to the Little Clear Creek drainage.

There is only one viable spur road location.

VIII. CONSULTATION WITH OTHERS

Forest Service I.D. Team

Fred Thompson - Geologist, Forest Supervisor's Office, Price, Utah.

Nancy Carlile - Geologist, Forest Supervisor's Office, Price, Utah.

Brent Barney - Engineer, Forest Supervisor's Office, Price, Utah.

Ted Fitzgerald - Engineer, Forest Supervisor's Office, Price, Utah.

Bob Thompson - Range Conservationist, Forest Supervisor's Office, Price, Utah.

Mark Call - Hydrologist, Forest Supervisor's Office.

Ben Black - District Ranger, Sanpete Ranger District, Ephraim, Utah.

Brent Erskine - Forester, Sanpete Ranger District, Ephraim, Utah.

U.S. GEOLOGICAL SURVEY

George Diwachak, Environmental Scientist.

Other Contacts

Ralph Ladd - Drilling Supervisor, Union Oil Company.

Rodney John - Regional Supervisor, Utah State Division of Wildlife Resources.

Robert Tibbs - Landowner, Indianola, Utah.

IX. DECISION NOTICE AND FINDING OF NO SIGNIFICANT EFFECT

UNION OIL COMPANY OF CALIFORNIA
EXPLORATORY WELL IN LITTLE CLEAR CREEK CANYON
UTAH COUNTY, UTAH
USDA - FOREST SERVICE
MANTI-LASAL NATIONAL FOREST

An Environmental Assessment Report that discusses the effects of a proposal by Union Oil Petroleum Company to drill an exploratory oil/gas well in Little Clear Creek is available for public review at the Sanpete Ranger District Office in Ephraim, Utah and in the Forest Supervisor's Office, Price, Utah.

It is my decision, based on the analysis and evaluation described in the Environmental Assessment, to allow the well to be drilled. I have adopted Alternative #2 as the acceptable alternative.

I have determined through the environmental analysis that this is not a major federal action that would significantly affect the quality of the human environment; therefore, an Environmental Impact Statement is not needed. This determination was made considering the following factors: (1) There are no threatened or endangered plants or animals within the affected area. (2) There are no special or unique esthetic features in the affected area. (3) There are no apparent adverse cumulative or secondary effects and (4) The flood plains will not be adversely affected.

Implementation of the proposal can begin on the date this Decision Notice is signed.

Reed C Chesterman Date 8/8/80
(Forest Supervisor)

Bennett W. Black Date 7/23/80
(District Ranger)

X. APPENDIX

1. Location and Transportation Plan Map.

2. Application to Drill and Thirteen Point Surface Use Development Plan (Original copy only).

3. Road Design Standards.

4. Bond Calculation.

Appendix #3

Union Oil - Gas/Oil Exploration

Road Design Standards (16 ADT)

	Dairy Fork-Indianola Road	Site Access Road
Design Speed	20 mph	10 mph
Horizontal Curvature Radius	100 Feet	200 Feet
Minimum Lane Width	16 Feet	14 Feet
Super-elevation	4%	Outsloped
Crown	Outsloped	Outsloped
Stopping Sight Distance	120 Feet	50 Feet
Maximum Grade	8% Sustained	8% Sustained
Ditch Width	As required due to flat cross slope, 3 foot width, 1 foot deep.	None
Turnouts	Intervisible 700 Maximum Spacing 10 Feet Wide 100 Feet Long 50 Taper Length	

	Both Roads
Cattleguards	HS-20-44 Loading
Cut and Fill Slopes	(1) 0'-5' - 3:1 (2) 5'-10' - 2:1 (3) Over 10' - 1½:1
Clearing	(1) 5 Feet beyond top of cut. (2) Toe of fill.
Topsoil	All topsoil will be conserved. Excess will be stockpiled in areas that are accessible to future use.

Road Design Standards (16 ADT) (Continued)

	Both Roads
Drainage	(1) Pipe to toe of fill for cross draining. (2) Dips at 260 feet on outslope sections. (3) Armored dips with 18" culverts at alluvial fans.
Earthwork	Balanced
Gravel Source	Off-Forest

APPENDIX 4. BOND CALCULATION FOR UNION OIL COMPANY

I. SITE REHABILITATION

A. Stripping of gravel from pad and access road

1. Time required - 16 hrs.

2. Equipment:

   a. 2 cu.yd. front-end loader w/operator $59.04/hr.

   b. Two, 6-8 cu.yd. dump trucks w/operator $23.34/hr.

   c. 2 hrs. D-8 Cat w/operator $60/hr.

Loader cost	$944	
Truck cost	373	
Cat cost	960	
Total	$2277	$2277

B. Scarification of soil on the site and access road

1. D-8 Cat w/operator and ripper
   Estimated time 4 hrs. $240

C. Spreading topsoil

1. 5 hrs. D-8 Cat $300

2. 6 hrs. grader w/operator & laborer
   $34.06/hr $205

3. 6 hrs. dump trucks $140

D. Miscellaneous Cat time - 5 hrs. $300

Total $3462

E. Seeding/Planting site & road cut and fill

1. Cost of seed $50

2. Estimate hydroseeding costs
   (includes equipment) 3000

$3050

F. Crew costs

1. GS-9 @ $8.20/hr. - 8 hrs./day	$197
2. GS-3 @ $4.30/hr. - 8 hrs./day (time required 3 days)	206
Total crew cost	$403
Cost round trip miles 100 @ $.25/mile for 4 days. 100 x 4 x $.25	$100
Total costs	$503

G. Fencing on site - net wire

Distance 1000 ft. @ $3.00/foot	$3000
Total rehabilitation costs	$10,015 (rounded to nearest $100)

II. ROAD #50006

Provide drainage, blade and reshade 2½ miles of road.

1. Grader & operator $26.49/hr. - time required 8 hrs.

$26.49 x 8 = $212

TOTAL ITEMS I AND II	=	$10,015
		212
		$10,227

Miscellaneous - includes overhead, travel, etc.
Includes cleaning of stream channel if necessary $500

TOTAL ALL ITEMS	$10,727
TOTAL BOND TO NEAREST $100	$10,800

Prepared ~~Reviewed~~ by Barnett W. Black Date 7/23/80
District Ranger, Sanpete R.D.

Approved by Fred C Christensen Date 8/8/80

Oil and Gas Drilling EA # 103-80

United States Department of the Interior
Geological Survey
2000 Administration Bldg.
1745 West 1700 South
Salt Lake City, Utah 84104

Usual Environmental Analysis

Date: August 19, 1980

Operator: Union Oil Co. Project or Well Name and No.: 1-G24

Location: 1859' FNL & 2292' FEL Sec. 24 T.11S R. 4 E

County: Utah State: Utah Field/Unit: Brown's Peak Unit

Lease No.: U-12111 Permit No.:

Joint Field Inspection Date: May 16, 1980

Prepared By: George Diwachak

Field Inspection Participants, Titles and Organizations:

George Diwachak, Paul Schneider	USGS
Ben Black, Brent Erskine, James Duncan	USFS
Fred Thompson, Brent Barney, Ted fitzgerald	USFS
Robert Thompson, N.J. Carlile	USFS
Ralph Ladd	Union Oil Co.
Danny Wood	W & C Construction Co.

Related Environmental Analyses and References:

1. U.S. Forest Service, EAR, Exploratory Well by Union Oil Co. of California
2. U.S. Forest Service EAR, APD, Union Oil Co. Well #1-J9 Sec. 9, T 11S, R 4E Lease # U-12107

sk 8-20-80

Drill pad 275'x300',
Reserve Pit 100x135',
New access 18' x 1700'
Existing road to be improved 30' x 3 miles
H_2S Contingency plan required
Conditions of approval p. 7 (1-7)

This analysis incorporates A USFS, EAR by reference and it is included in the Appendix.

EA # 103-80

DISCRIPTION OF PROPOSED ACTION

Proposed Action:

1. Location State: Utah

   County: Utah

   1859' FNL, 2292' FEL, SW 1/4 NE 1/4

   Section 24 T 11S, R 4E S.L.M.

2. Surface Ownership Location: Public

   Access Road: Public & Private

   Status of
   Reclamation Agreements:

   See Appendix

3. Dates APD Filed: November 20, 1979

   APD Technically Complete: December 12, 1979

   APD Administratively Complete: July 30, 1980.

4. Project Time Frame

   Starting Date: Upon Approval

   Duration of Drilling activities: 160 days.

   A period of 30 to 60 days is normally necessary to complete a well for production if hydrocarbons are discovered. If a dry hole is drilled, recontouring and reseeding would normally occur within one year; revegetation or restoration may take several years. If the well is a producer, an indefinite period of time would occur between completion and rehabilitation.

5. Related actions of other federal or state agencies and Indian tribes:
   Final approval of road and pad design engineering must be granted by the U.S. Forest Service and are included in their stipulations. Final approval would be granted in a Road use Permit.

6. Nearby pending actions which may affect or be affected by the proposed action:
   None known

7. Status of variance requests:
   None known

The following elements of the proposed action would/could result in environmental impacts:

1. A drill pad about 275' wide x 300' long and a reserve pit 100' x 135' would be constructed.Approximately 1700' feet of new access road, averaging 18' driving surface, would be constructed and approximately 3 miles of existing road would be improved to USFS standards 4-5 acres of disturbed surface would be associated with the project. Maximum disturbed width of access road should be limited to 30'.

2. Drilling

3. Waste disposal.

4. Traffic.

5. Water requirements.

6. Completion.

7. Production.All production facilities would be included on disturbed surfaces of the pad.

8. Transportation of hydrocarbons.-were not requested with the APD.

Details of the proposed action are described in the Application for Permit to Drill and the attached Sundry Notice.

The location was moved to reduce drainage, reduce cuts and fills and eliminate pad and pit construction in unstable soils.

The access road was changed per the attached Sundry Notice to reduce grade and avoid drainage.

Environmental Considerations of the Proposed Action:

Regional Setting/Topography: See USFS EAR

PARAMETER

A. Geology

1. Other Local Mineral Resources to be Protected: The area may be prospectively valuable for coal. Adequate insulation of coal beds is necessary. Logging of the well would provide valuable information of a potential resource.

Information Source: Mineral Evaluation Report. Mining Report

2. Hazards:
a. Land Stability: The location was moved 226' in a northwesterly direction to avoid an unstable area as evidenced by downed timber (See photographs). The new site is on relatively stable ground.
Information Source: USFS APD SN FO

b. Subsidence: Insignificant impacts expected
Information Source: F.O.

c. Seismicity: The test site is within an area of moderate seiscic risk.
Information Source: Algermissen & Perkins-"Earthquake Hazard Map of the U.S.

d. High Pressure Zones/Blowout Prevention: No high pressures are expected. BOP program outlined in APD
Information Source: APD MER

B. Soils:
1. Soil Character: See USFS EAR
Information Source: USFS

2. Erosion/Sedimentation: See USFS EAR
Information Source: USFS

C. Air Quality: The wellsite is in a class II attainment area. Air quality would decrease from equiptment and vehicle operations and fugitive dust returning to pre-drilling levels upon abandonment.
Information source: Utah State Health Dept (pers. comm.)

D. Noise Levels: Ambient noise levels would increase during drilling and completion affecting wildlife in a distributional sence.
Information Source: Field Observation

E. Water Resources

1. Hydrologic Character

a. Surface Waters: See USFS EAR Water for drilling would be obtained from a pond constructed on private land.

Information Source: USFS FO Operator

b. Ground Waters: Fresh water could occur in the Indianola Formation.. The casing program has been designed to protest potential fresh water.

Information Source: Mineral Evaluation Report APD

2. Water Quality

a. Surface Waters: No significant effects to surface waters are expected.

Information Source: Field Observation USFS EAR

b. Ground Waters: Ground waters could be affected by the introduction of drilling fluids and commingling of aquifers. The casing and cementing program would protect potential fresh water aquifers.

Information Source. APD MER FO

F. Flora and Fauna

1. Endangered and Threatened Species Determination

Based on the informal comments received from USFS, on August 11, 1980 we determine that there would be no effect on endangered and threatened species and their critical habitat.

2. Flora: See USFS EAR

Information Source: USFS

3. Fauna: See USFS EAR Wildlife would be affected in a distributional sence

Information Source: USFS

G. Land Uses

1. General: Grazing and recreation (Big Game hunting) are primary land uses of area. Drilling could affect hunting in the immediate area.

Information Source: USFS FO

2. Affected Floodplains and/or Wetlands: N/A

Information Source: F.O. USFS

3. Roadless/Wilderness Area: N/A

Information Source: USFS

H. Aesthetics: The operation does not blend with the surroundings. Visual impacts are described in the USFS EAR. Painting any permanent equiptment a color to blend with the surroundings would reduce visual impacts in the immediate area of the drillsite.

Information Source: Field Observation USFS

I. Socioeconomics: One well would have little affect on local population and economics. However, if a major field were discovered, local and regional economics would increase and populations could be affected.

Information Source: FO

J Cultural Resources Determination: Based on the informal comments received from USFS on 8-11-80 we determine that there will be no effect on cultural resources.

Information Source: USFS

K. Hydrogen Sulfide gas may be encountered in the Twin Creek Formation. Submittal approval and implementation of an H2S contingency plan would be necessary prior to entry to the horizon.

Information Source: MER APD Drill logs, Union 1-J9 Well sec. 9, T 11S, R 4E.

L. Adequacy of Restoration Plans: The restoration plans meet the minimum requirement of NTL-6 Additional restoration measures have been recommended by the USFS

Information Source: APD FO USFS

Alternatives to the Proposed Action:

1. Disapproving the proposed action or no action - If the proposed action is denied, no action would occur, the existing environment would remain in its present state, the lessee/operator would not realize any return on investments and the public would be denied a potential energy source.

2. Approving the original proposed location and road with recommended stipulations. Several severe environmental consequences would be evident with implementation of this alternative included, Stability, polution, erosion and excessive grades. Rehabilitation would be difficult. Therefore, the approval of the original site and road is not recommended.

3. Approve the new location and road as recommended by the U.S. Forest Service and outlined in the enclosed Sundry Notice. Implementation of the new site and road would reduce cuts, reduce the potential for erosion and sedimentation to Little Clear Creek, facilitate rehabilitation and provide for a more stable drll site. The new access road would reduce the severe grades posed by the original proposal and provide easy access to the location. This is the preferred alternative.

Adverse Environmental Effects:

1. If approved as proposed:

   a. About 5 acres of vegetation would be removed, increasing and accelerating erosion potential.

   b. Pollution of groundwater systems would occur with the introduction of drilling fluids into the aquifer(s). The potential for interaquifer leakage and lost circulation is ever-present, depending on the casing program.

   c. Minor air pollution would be induced on a temporary basis due to exhaust emissions from rig engines and support traffic.

   d. The potential for fires, leaks, spills of gas and oil or water exists.

   e. During construction and drilling phases of the operation, noise and dust levels would increase.

   f. Distractions from aesthetics during the lifetime of the project would exist.

   g. Erosion from the site would eventually be carried as sediment in Little Clear Creek. The potential for pollution to Little Clear Creek would exist through leaks and spills.

   h. If hydrocarbons would be discovered and produced, further development of the area could be expected to occur, which would result in the extraction of irreplaceable resource, and further negative environmental impacts. These impacts include the cumulative loss of wildlife habitat due to the areas necessary for roads, pipelines, drillsites, and transmission lines. These actions may disrupt wildlife social behavior and force habitat relocation over an extended period of time. In addition, the cumulative effects of non-point erosion become substantial in a developing field, primarily those located near perennial streams where siltation and sedimentation are critical to aquatic life cycles.

   i. Hydrogen Sulfide gas could be encountered in the Twin Creek Formation.

2. Conditional Approval:

All adverse impacts described in section one above would occur.except:
a. Moving the location and road would reduce cuts and fills, erosion /sedimentation/pollution hazards to Little Creek, provide for better rehabilitation and drastically reduce road grades.
b. Submittal, Approval and Implementation of an H2S Contingency Plan would reduce safety hazards associated with the poisonous gas.

Recommended Approval Conditions:

Drilling should be allowed, provided the following mitigative measures are incorporated into the proposed APD and adhered to by the operator:

1. See attached Leese Stipulations.

2. See attached USFS Stipulations.

3. The location and road will be moved to the northwest as outlined in the Sundry Notice of 8-12-80

4. An H2S Contingency Plan must be submitted for approval prior to drilling out the surface casing.

5. The approved H2S Contingency Plan must be implemented and all safety equipment installed when drilling reaches a depth of 1000' or above, or within 7 days of penetrating (whichever is the lesser) the Twin Creek Formation (5,460')

6. Any shows of H2S must be reported to the USGS.

7. Adequate warning signs of drilling in an H2S environment must be placed at strategic locations on Forest Road 50006 immediately upon implementation of the H2S Contingency Plan

Controversial Issues and Conservation Division Response:

None

We have considered the proposed action in the preceding pages of this EA and find, based on the analysis of environmental considerations provided therein, no evidence to indicate that it will significantly (40 CFR 1508.27) impact the quality of the human environment.

Determination:

I determine that the proposed action (as modified by the recommended approval conditions) does not constitute a major Federal action significantly affecting the quality of the human environment in the sense of NEPA, Section 102 (2)(C).

W P Martens FOR E. W. GUYNN DISTRICT ENGINEER

Signature & Title of Approving Official

AUG 21 1980

Date

FOREST ROAD - 5006 - Plugged Culvert at Side Drainage Alluvial Fan -

ORIGINAL ACCESS ROAD

ORIGINAL LOCATION NE ↑

ORIGINAL LOCATION NW ↑
NEW LOCATION IN BACKGROUND

USO 3110-2
1/70

Serial No.:

U- 12111

The undersigned agrees to the inclusion of the following special Forest Service stipulations in addition to those shown on Form 3103-2:

(1) The lessee will not undertake any drilling, construction of roads or pipelines, or any other activity which involves removal of vegetation until a plan of construction and development has been approved by the Forest Service representative. Such approval may be conditioned on reasonable requirements to prevent erosion, water pollution, or damage to surface resources and to provide for restoration of the surface.

(2) A strip of land 100 feet on each side of the centerline of the Lake Fork Road where it passes through the SE¼SE¼ Sec. 13, and a strip of land 100 feet on each side of the centerline of the Little Clear Creek Road where it passes through the NE¼, SW¼ Sec. 24, T. 11 S., R. 4 E., SLM, Utah, are roadside zones containing important aesthetic values for public benefit. No occupancy of the surface of these strips is authorized by this lease.

Lessee

All matters relating to the stipulations in this case should be directed to the authorized representative of the Secretary of Agriculture indicated below:

( ) Forest Supervisor, Ashley National Forest, 437 East Main, Vernal, Utah 84078.

( ) Forest Supervisor, Dixie National Forest, 500 South Main Street, Cedar City, Utah 84720.

( ) Forest Supervisor, Fishlake National Forest, 170 North Main, Richfield, Utah 84701.

( ) Forest Supervisor, Uinta National Forest, 88 West 100 North, P. O. Box 1428, Provo, Utah 84601.

(X) Forest Supervisor, Manti-LaSal National Forest, 350 East Main, Price, Utah 84501.

( ) Forest Supervisor, Wasatch National Forest, 4438 Federal Building, 125 South State Street, Salt Lake City, Utah 84111.

** FILE NOTATIONS **

DATE: Nov 30, 1979

Operator: Union Oil Company of California

Well No: Brown's Peak Unit # 1-G24

Location: Sec. 24 T. 11S R. 4E County: Utah

File Prepared: ✓ Entered on N.I.D.: ✓

Card Indexed: ✓ Completion Sheet: ✓

✓ API Number 43-047-30009

CHECKED BY:

Geological Engineer: _____

Petroleum Engineer: _____

Director: OK ✓

APPROVAL LETTER:

Bond Required: _____ Survey Plat Required: _____

Order No. _____ O.K. Rule C-3 ✓

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

Lease Designation Fed - not a Unit yet Plotted on Map ✓

Approval Letter Written ✓

WTM

hl
PI

November 29, 1979

Union Oil Company of California
P.O. Box 2620
Casper, Wyoming 86202

Re: Well No. Borwn's Peak Unit #1-G24
Sec. 24, T. 11S, R. 4E.,
Utah County, Utah

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

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

MICHAEL T. MINDER
Geological Engineer
Home: 876-3001
Office: 5335771

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (acquifers) are encountered during drilling. Your cooperation in completing this form will be appreciated.

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

The API number assigned to this well is 43-049-30009.

Sincerely,

DIVISION OF OIL, GAS AND MINING

Michael T. Minder
Geological Engineer

/btm

cc: USGS

January 16, 1980

MEMORANDUM

TO: File

FROM: Michael T. Minder
Geological Engineer
Division of Oil, Gas
and Mining

Re: Union Oil Company of California
Well No. Browns Peak Unit #1-G24
Sec. 24, T. 11S, R. 4E.,
Utah County, Utah

On this date, Union Oil Company was contacted at their Casper office concerning the status of the above referenced well.

Although a permit to drill was issued by the Division, the USGS is waiting for an archeological study to be conducted before issuing their approval. Union Oil's engineer said that he velieves the Forest Service would like to move the location, but he didn't know why. In any case, it will be spring before anything can be determined and the site graded.

cc: USGS

File Designation 2820

Date July 23, 1980

ENVIRONMENTAL ASSESSMENT REPORT

EXPLORATORY WELL BY UNION OIL COMPANY OF CALIFORNIA

Lead Agency: USDA Forest Service
Forest Supervisor
Manti-LaSal National Forest
Price, Utah 84501

Responsible Official: Reed C. Christensen
Forest Supervisor
Manti-LaSal National Forest
Price, Utah 84501

For Further Information Contact: Ben Black
Sanpete Ranger District
Ephraim, Utah 84627

Prepared by: Bennett W. Black (District Ranger) Date 7/23/80

Recommended Approval by: William E. Dee (Forest Engineer) Date 8/2/80

Approved by: Reed C. Christensen (Forest Supervisor) Date 8/8/80

ABSTRACT: Union Oil Company of California proposes to drill an exploratory well in Little Clear Creek Canyon. This EAR discusses the environmental impacts of this proposal.

Union Oil Co. 24-11S-4E
Utah County

Memorandum

To: District Oil and Gas Engineer, Mr. Edward Guynn

From: Mining, Supervisor, Mr. Jackson W. Moffitt

Subject: Application for Permit to Drill (form 9-331c) Federal oil and gas lease No. U-12111 Well No. 1-G24

1. The location appears potentially valuable for:

   [ ] strip mining*

   [x] underground mining** coal

   [ ] has no known potential.

2. The proposed area is

   [ ] under a Federal lease for _____ under the jurisdiction of this office.

   [x] not under a Federal lease under the jurisdiction of this office.

   [x] Please request the operator to furnish resistivity, density, Gamma-Ray, or other appropriate electric logs covering all formations containing potentially valuable minerals subject to the Mineral Leasing Act of 1920.

*If location has strip mining potential:

Surface casing should be set to at least 50 feet below the lowest strip minable zone at _____ and cemented to surface. Upon abandonment, a 300-foot cement plug should be set immediately below the base of the minable zone.

**If location has underground mining potential:

The minable zones should be isolated with cement from a point 100 feet below the formation to 100 feet above the formation. Water-bearing horizons should be cemented in like manner. Except for salines or water-bearing horizons with potential for mixing aquifers, a depth of 4,000 feet has been deemed the lowest limit for cementing.

Signed Allen L Vance

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

RECEIVED
AUG 15 1980
DIVISION OF OIL, GAS & MINING

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR
Union Oil Company of California

3. ADDRESS OF OPERATOR
P. O. Box 2620 - Casper, WY 82602

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1859' FNL & 2292' FEL
AT TOP PROD. INTERVAL: N.A.
AT TOTAL DEPTH: N.A.

5. LEASE
U-12111

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
N.A.

7. UNIT AGREEMENT NAME
Brown's Peak Unit

8. FARM OR LEASE NAME
Federal

9. WELL NO.
1-G24

10. FIELD OR WILDCAT NAME
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 24, T.11S., R.4E.

12. COUNTY OR PARISH
Utah

13. STATE
Utah

14. API NO.
N.A.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
7435' G.L. (Ungraded)

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	☐		☐
FRACTURE TREAT	☐		☐
SHOOT OR ACIDIZE	☐		☐
REPAIR WELL	☐		☐
PULL OR ALTER CASING	☐		☐
MULTIPLE COMPLETE	☐		☐
CHANGE ZONES	☐		☐
ABANDON*	☐		☐
(other) CHANGE OF PROPOSED LOCATION			

APPROVED BY THE DIVISION OF
OIL, GAS, AND MINING
DATE: 8/21/80
BY: CB Feight

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

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.)*

In order to comply with Manti-LaSal National Forest requirements, we must change our proposed location of subject well from 1936' FNL & 2079' FEL, Section 24, Township 11 South, Range 4 East, Utah County, Utah, as shown on our Application for Permit to Drill, dated November 16, 1979, to 1859' FNL & 2292' FEL, Section 24, Township 11 South, Range 4 East, Utah County, Utah, as shown above and on the attached survey plats.

We are enclosing attachments to our Multi-point Surface Use and Operations Plan that had to be revised because of this change of location.

Subsurface Safety Valve: Manu. and Type - - - - Set @ - - - Ft.

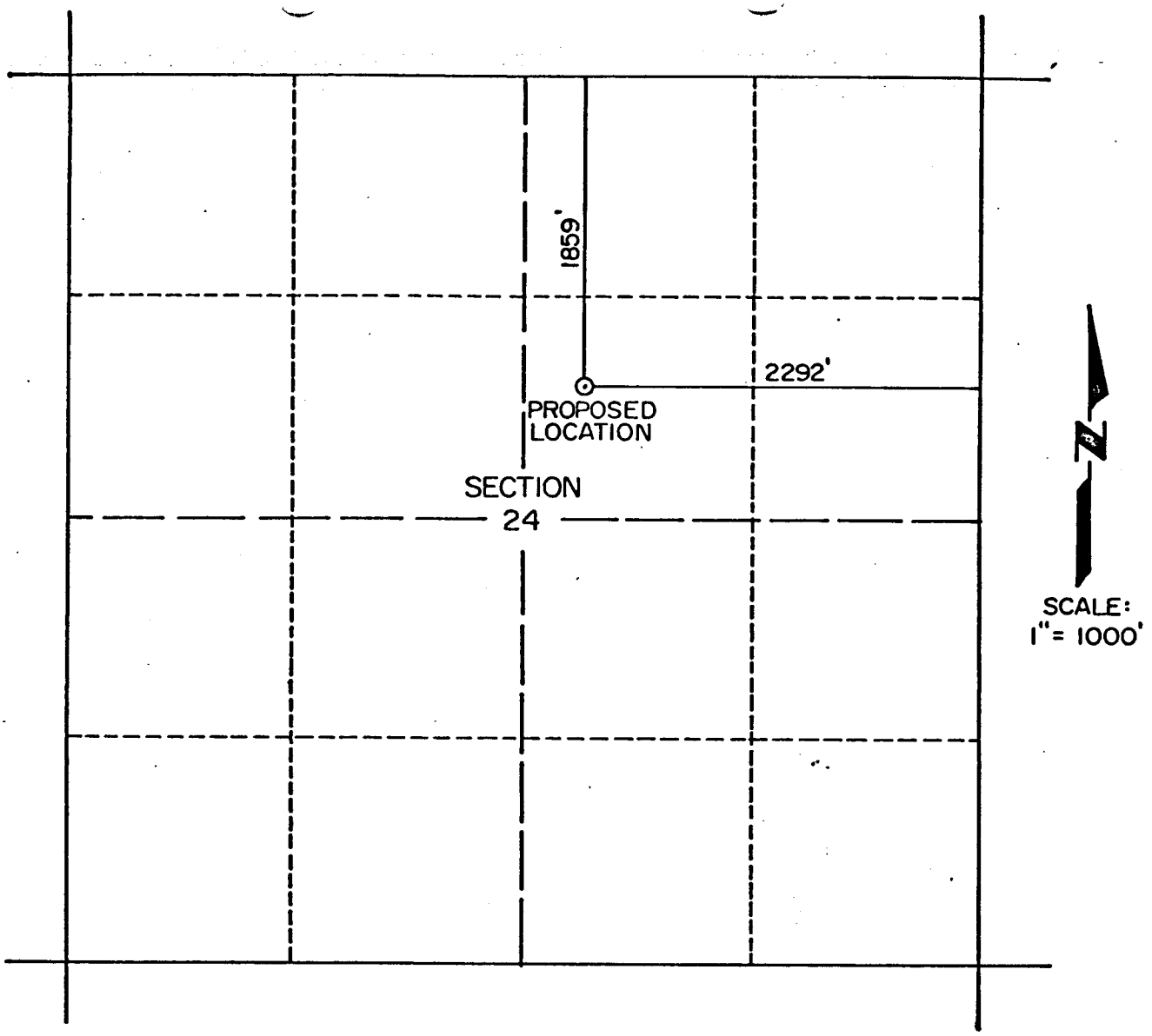
18. I hereby certify that the foregoing is true and correct

SIGNED R. C. Ladd, Jr. TITLE District Drlg. Superintendent DATE 8-12-80

(This space for Federal or State office use)

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

*See Instructions on Reverse Side



WELL LOCATION: UNION OIL CO. OF CALIFORNIA - FEDERAL NO.1-624

LOCATED 1859 FEET SOUTH OF THE NORTH LINE AND 2292 FEET WEST OF THE EAST LINE OF SECTION 24, TOWNSHIP 11 SOUTH, RANGE 4 EAST, SALT LAKE BASE AND MERIDIAN, UTAH COUNTY, UTAH.

EXISTING GROUND ELEVATION DETERMINED AT 7435 FEET BASED ON USGS DATUM.

I HEREBY CERTIFY THE ABOVE PLAT REPRESENTS A SURVEY MADE UNDER MY SUPERVISION AND THAT IT IS ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Robert D Gunnell

ROBERT D. GUNNELL
REGISTERED LAND SURVEYOR

REGISTERED LAND SURVEYOR
NO. 4860
Robert D. Gunnell
STATE OF UTAH

ROLLINS, BROWN & GUNNELL, INC. **CONSULTING ENGINEERS**	UNION OIL COMPANY CASPER, WYO. WELL LOCATION PLAT	DATE: AUG. '80

Form 9-331 C
(May 1963)

SUBMIT IN T ICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER — SINGLE ZONE [X] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: Union Oil Company of California

3. ADDRESS OF OPERATOR: P. O. Box 2620 - Casper, WY 86202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: ~~1936'~~ 1859' FNL & ~~2079'~~ 2292' FEL
At proposed prod. zone: Same as Surface

RECEIVED SEP 3 1980

5. LEASE DESIGNATION AND SERIAL NO.: U-12111

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N.A.

7. UNIT AGREEMENT NAME: Brown's Peak Unit

8. FARM OR LEASE NAME: Federal

9. WELL NO.: 1-G24

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 24, T.11S., R.4E.

12. COUNTY OR PARISH: Utah

13. STATE: Utah

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 5.06 miles northeast of Indianola, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 561' to lease line; 6640' to unit line.

16. NO. OF ACRES IN LEASE: 1972.74

17. NO. OF ACRES ASSIGNED TO THIS WELL: 640 (18,010.71 Ac. Unit)

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

19. PROPOSED DEPTH: 10,000'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 7450' GR (Ungraded)

22. APPROX. DATE WORK WILL START*: 4-15-80

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
26"	20"	94#	60'	65 sx.
17-1/2"	13-3/8"	48#	350'	250 sx. (Cmt. to Circ)
12-1/4"	9-5/8"	36#/40#	5,600'	1250 sx.
8-3/4"	5-1/2"	15.5#/17#	T.D.	300 sx.

DUPLICATE COPY

PROPOSED DRILLING PROGRAM:

Set 20" conductor casing in 26" hole with rat-hole machine. Cement with redi-mix concrete. Drill 17-1/2" hole to 350'. Run and cement 13-3/8" casing. Drill 12-1/4" hole to 5600'. Run and cement 9-5/8" casing. Drill 8-3/4" hole to T.D. at approximately 10,000'. Log, and if productive, run and cement 5-1/2" casing.

A double-gate BOP and annular preventer will be used. A choke manifold with an adjustable and a positive choke will also be used. The BOP and choke manifold will be pressure tested prior to drilling out cement and will be mechanically tested daily and each test will be logged on the IADC tour sheet.

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 R. G. Ladd, Jr. TITLE District Drilling Supt. DATE 11-16-79

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE FOR E. W. GUYNN DISTRICT ENGINEER DATE AUG 29 1980

CONDITIONS OF APPROVAL, IF ANY:

CONDITIONS OF APPROVAL ATTACHED TO OPERATOR'S COPY

*See Instructions On Reverse Side

NOTICE OF APPROVAL

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

Utah O & G

Production Facilities and Flowline NOT Approved

Union Oil and Gas D ion: Central Region

Union Oil Company of California
Post Office Box 2620, Casper, Wyoming 82602
Telephone (307) 234-1563

UNION 76

December 2, 1980

Utah Oil & Gas Conservation Commission
1588 West North Temple
Salt Lake City, UT 84116

Attn: Mr. Cleon Feight
Director

Re: Application for Permit to Drill
Federal Well No. 1-G24
1859' FNL & 2292' FEL
Sec. 24, T.11S., R.4E.
Utah County, Utah
(API No. 43-049-30009)

Gentlemen:

On November 16, 1979, an Application for Permit to Drill for subject well was submitted to your office and was approved by your office by letter dated November 29, 1979. **The proposed location has been changed at the request of the U.S. Geological Survey to the location shown above.**

Due to the large amount of dirtwork necessary prior to the commencement of drilling operations and the inclement weather, Union Oil Company could not commence drilling operations before the expiration of their Lease No. U-12111. An Application for Suspension of Operations was submitted to the U.S. Geological Survey in order to delay actual commencement of drilling operations until the spring or summer of 1981. Approval of the requested suspension was granted effective August 1, 1980. This suspension is for an indefinite period of time, subject to automatic termination on the first of the month in which Union Oil Company of California, as lessee of record, commences drilling operations, or on August 1, 1981, whichever occurs first.

Union Oil Company plans to start drilling operations around the 1st of June, 1981. Before drilling operations are commenced, we will re-submit our Application for Permit to Drill to your office.

Very truly yours,

UNION OIL COMPANY OF CALIFORNIA

R. G. Ladd, Jr.
District Drilling Superintendent

RGL:pd

Form 9-331 C
(May 1963)

SUBMIT IN TR ATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER — SINGLE ZONE [X] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: Union Oil Company of California

3. ADDRESS OF OPERATOR: P. O. Box 2620 - Casper, WY 82602

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1859' FNL & 2292' FEL
At proposed prod. zone: Same as Surface

5. LEASE DESIGNATION AND SERIAL NO.: U-12111

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N.A.

7. UNIT AGREEMENT NAME: Brown's Peak

8. FARM OR LEASE NAME: Federal

9. WELL NO.: 1-G24

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 24, T.11S., R.4E.

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 5.06 miles northeast of Indianola, Utah

12. COUNTY OR PARISH: Utah

13. STATE: Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 561' to lease line; 6640' to unit line.

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17. NO. OF ACRES ASSIGNED TO THIS WELL: 640 (18,010.71 Ac. Unit)

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

19. PROPOSED DEPTH: 10,000'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 7435' GR (Ungraded)

22. APPROX. DATE WORK WILL START*: 6-1-81

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
26"	20"	94#	60'	65 sx.
17-1/2"	13-3/8"	48#	350'	250 sx. (Cmt. to Circ.)
12-1/4"	9-5/8"	36#/40#	5,600'	1250 sx.
8-3/4"	5-1/2"	15.5#/17#	T.D.	300 sx.

PROPOSED DRILLING PROGRAM:

Set 20" conductor casing in 26" hole with rat-hole machine. Cement with redi-mix concrete. Drill 17-1/2" hole to 350'. Run and cement 13-3/8" casing. Drill 12-1/4" hole to 5600'. Run and cement 9-5/8" casing. Drill 8-3/4" hole to T.D. at approximately 10,000'. Log, and if productive, run and cement 5-1/2" casing.

A double-gate BOP and annular preventer will be used. A choke manifold with an adjustable and a positive choke will also be used. The BOP and choke manifold will be pressure tested prior to drilling out cement and will be mechanically tested daily and each test will be logged on the IADC tour sheet.

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.

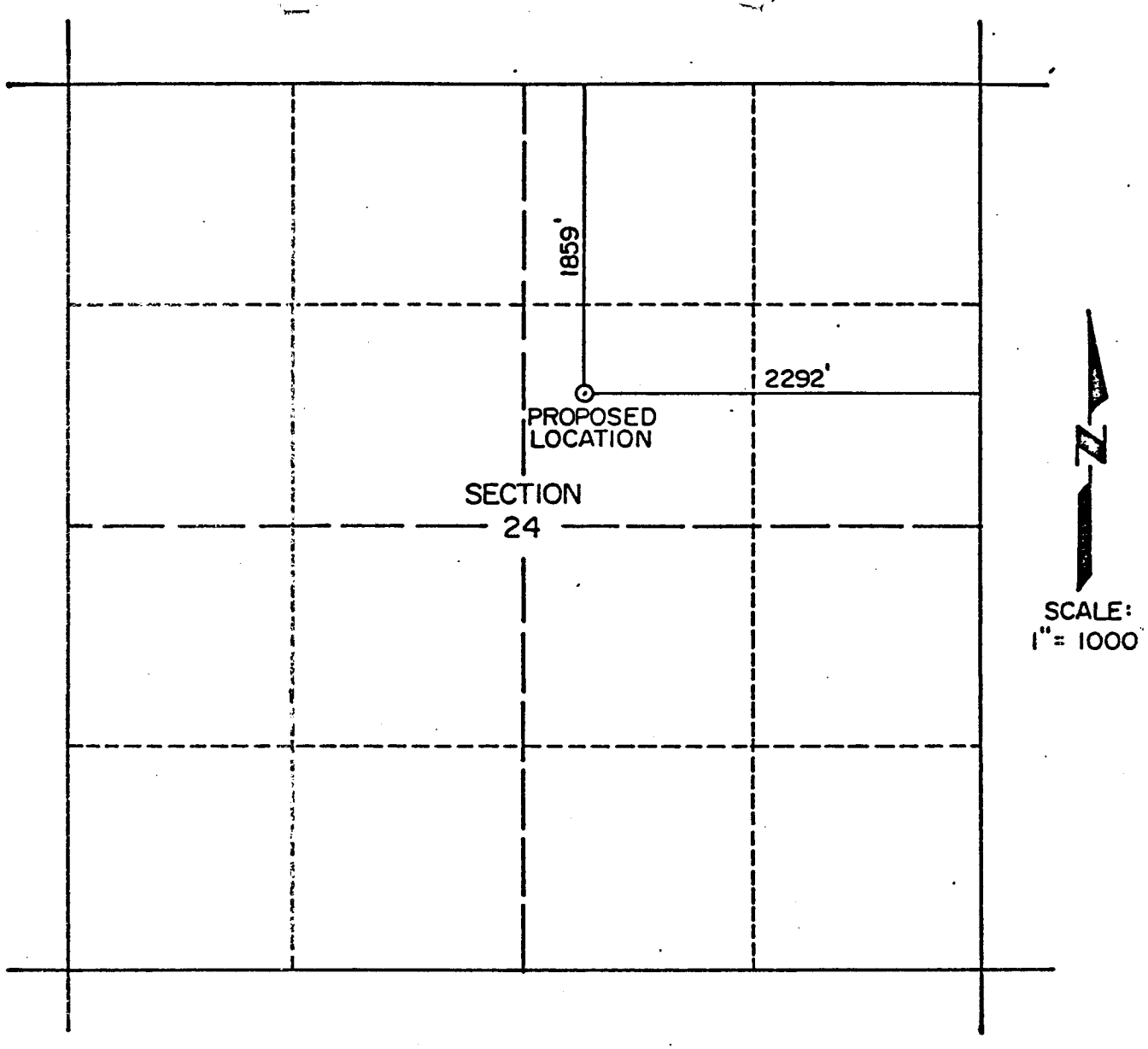
SIGNED R. G. Ladd, Jr. TITLE District Drilling Supt. DATE 4-22-81

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:



WELL LOCATION: UNION OIL CO. OF CALIFORNIA - FEDERAL NO.1-624

LOCATED 1859 FEET SOUTH OF THE NORTH LINE AND 2292 FEET WEST OF THE EAST LINE OF SECTION 24, TOWNSHIP 11 SOUTH, RANGE 4 EAST, SALT LAKE BASE AND MERIDIAN, UTAH COUNTY, UTAH.

EXISTING GROUND ELEVATION DETERMINED AT 7435 FEET BASED ON USGS DATUM.

I HEREBY CERTIFY THE ABOVE PLAT REPRESENTS A SURVEY MADE UNDER MY SUPERVISION AND THAT IT IS ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Robert D. Gunnell

ROBERT D. GUNNELL
REGISTERED LAND SURVEYOR

REGISTERED NO. 4860 Robert D. Gunnell STATE OF UTAH

ROLLINS, BROWN & GUNNELL, INC. **CONSULTING ENGINEERS**	UNION OIL COMPANY CASPER, WYO. WELL LOCATION PLAT	DATE: AUG. '80

U. S. GEOLOGICAL SURVEY - CONSERVATION DIVISION

FROM: : DISTRICT GEOLOGIST, , SALT LAKE CITY, UTAH

TO : DISTRICT ENGINEER, O&G, SALT LAKE CITY, UTAH

SUBJECT: APD MINERAL EVALUATION REPORT LEASE NO. U-12111

OPERATOR: Union Oil of California WELL NO. 1-G24

LOCATION: ¼ SW ¼ NE ¼ sec. 24, T. 11 S, R. 4E, SLM

Utah County, Utah

---

1. Stratigraphy: Operator's stratigraphy appears reasonable.

Indianola	- Surface
Arapien	2,960
Twin Creek	5,460
Nugget	6,260
Chinle	7,460

2. Fresh Water: Fresh water may occur in the Indianola Group.

3. Leasable Minerals: Prospectively valuable for coal. - what formation? in Price River Fm.

4. Additional Logs Needed: Operator's logging program is adequate.

5. Potential Geologic Hazards: Hydrogen Sulfide(H_2S) may be found in Twin Creek.

6. References and Remarks: U.S.G.S. files, SLC., Utah

Signature: J. Paul Matheny Date: 12 - 18 - 79

George

Union Oil and Gas D ·n: Central Region

Union Oil Company of California
Post Office Box 2620, Casper, Wyoming 82602
Telephone (307) 234-1563

union 76

April 22, 1981

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

Attn: Cleon B. Feight
Director

Re: Application for Permit to Drill
Federal Well No. 1-G24
Brown's Peak Unit
Utah County, Utah

API No. 43-049-30009

Re-Submittal

Gentlemen:

An application for Permit to Drill for subject well was submitted to your office on November 16, 1979, and approved by your office by letter dated November 29, 1979. However, due to the delay in obtaining approval to drill from the Forest Service and the U.S. Geological Survey, we were unable to begin drilling operations before the State permit expired. An Application for Suspension of Operations was submitted to the U.S. Geological Survey in order to postpone drilling operations until the spring or summer of 1981. Approval of the suspension was granted effective August 1, 1980.

Union Oil Company plans to commence drilling operations around the first of June, 1981; and is, therefore, resubmitting the Application for Permit to Drill at this time.

Very truly yours,

UNION OIL COMPANY OF CALIFORNIA

R. G. Ladd, Jr.
District Drilling Superintendent

RGL:pd
Enclosures

Form 9–331
Dec. 1973

Form Approved.
Budget Bureau No. 42–R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9–331–C for such proposals.)

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR
Union Oil Company of California

3. ADDRESS OF OPERATOR
P. O. Box 2620 - Casper, WY 82602

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1859' FNL & 2292' FEL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
U-12111

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
N.A.

7. UNIT AGREEMENT NAME
Brown's Peak Unit

8. FARM OR LEASE NAME
Federal

9. WELL NO.
1-G24

10. FIELD OR WILDCAT NAME
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 24, T.11S., R.4E.

12. COUNTY OR PARISH
Utah

13. STATE
Utah

14. API NO.
43-049-30009

15. ELEVATIONS (SHOW DF, KDB, AND WD)
7435' GR (Ungraded)

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	☐		☐
FRACTURE TREAT	☐		☐
SHOOT OR ACIDIZE	☐		☐
REPAIR WELL	☐		☐
PULL OR ALTER CASING	☐		☐
MULTIPLE COMPLETE	☐		☐
CHANGE ZONES	☐		☐
ABANDON*	☐	(DRY HOLE)	☐
(other) SPUD NOTICE (Conductor)			

(NOTE: Report results of multiple completion or zone change on Form 9–330.)

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.)*

MIRU Marco Rat Hole Drillers. Spudded 30" hole at 4:00 p.m., 5-9-81 Drilled to 53' below ground level and set 53' of 20", 94# conductor pipe at 53' with 225 sacks of regular cement with 3% $CaCl_2$, filling to the surface.

Waiting on rotary rig.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED R. G. Ladd TITLE District Drilling Superintendent DATE 5-11-81
R. G. Ladd, Jr.

(This space for Federal or State office use)

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

*See Instructions on Reverse Side

NOTICE OF SPUD

Caller: Union Oil Co. of CA, Ralph Ladd-Casper

Phone: 234-1563

Well Number: 1-G 24

Location: SW NE 24-11S-4E

County: Utah State: Utah

Lease Number: Utah 12111

Lease Expiration Date: 8-31-80 (SOP effective 8-1-80)

Unit Name (If Applicable): BROWNS PEAK

Date & Time Spudded: May 9, 1981; 4^00 PM

Dry Hole Spudder/Rotary: Dry hole

Details of Spud (Hole, Casing, Cement, etc.)

Set 53' of 20" conductor w/225 sx

① Will follow-up w/rig to set surface 13 3/8"

② " " " w/rotary to drill & T.D.

Rotary Rig Name & Number:

Approximate Date Rotary Moves In:

FOLLOW WITH SUNDRY NOTICE

Call Received By: WPM

Date: 5-11-81

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR
Union Oil Company of California

3. ADDRESS OF OPERATOR
P. O. Box 2620 - Casper, WY 82602

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1859' FNL & 2292' FEL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
U-12111

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
N.A.

7. UNIT AGREEMENT NAME
Brown's Peak Unit

8. FARM OR LEASE NAME
Federal

9. WELL NO.
1-G24

10. FIELD OR WILDCAT NAME
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 24, T.11S., R.4E.

12. COUNTY OR PARISH
Utah

13. STATE
Utah

14. API NO.
43-049-30009

15. ELEVATIONS (SHOW DF, KDB, AND WD)
7435' GR (Ungraded)

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	☐		☐
FRACTURE TREAT	☐		☐
SHOOT OR ACIDIZE	☐		☐
REPAIR WELL	☐		☐
PULL OR ALTER CASING	☐		☐
MULTIPLE COMPLETE	☐		☐
CHANGE ZONES	☐		☐
ABANDON*	☐		☐
(other) CHANGE PLANS			

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

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.)*

Union Oil Company of California proposes to set 8-5/8" casing through the Twin Creek formation rather than 9-5/8" casing 160' into the Twin Creek formation as originally proposed, in order to case off possible H_2S gas show. H_2S detection safety equipment will be installed prior to drilling into the Twin Creek formation.

Also, a rig was hired with the pits on the driller's side; therefore, the rig has been turned 180°. No additional dirtwork will be required. (Attached is revised Attachment No. 9.)

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED R. G. Ladd, Jr. TITLE District Drilling Superintendent DATE 5-12-81

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

Providing proper H_2S equipment is used (BOP etc.) in drilling & completing the well.

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
DATE: 5-22-81
BY: M. J. Minder

*See Instructions on Reverse Side

P

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

NAME OF COMPANY: Union Oil Co.

WELL NAME: Federal 1-G24

SECTION 24 SW NE TOWNSHIP 11S RANGE 4E COUNTY Utah

DRILLING CONTRACTOR Parker

RIG # 56

SPUDDED: DATE 5-18-81

TIME 11:00 p.m.

HOW rotary

DRILLING WILL COMMENCE 5-18-81

REPORTED BY Peg Dill

TELEPHONE # 307-234-1563

DATE 5-20-81 SIGNED KO

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

RECEIVED
JUN 24

DIVISION OF
OIL, GAS & MINING

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR
Union Oil Company of California

3. ADDRESS OF OPERATOR
P. O. Box 2620 - Casper, WY 82602

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1859' FNL & 2292' FEL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
U-12111

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
N.A.

7. UNIT AGREEMENT NAME
Brown's Peak Unit

8. FARM OR LEASE NAME
Federal

9. WELL NO.
1-G24

10. FIELD OR WILDCAT NAME
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 24, T.11S., R.4E.

12. COUNTY OR PARISH
Utah

13. STATE
Utah

14. API NO.
43-049-30009

15. ELEVATIONS (SHOW DF, KDB, AND WD)
7435' GR (Ungraded)

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	☐		☐
FRACTURE TREAT	☐		☐
SHOOT OR ACIDIZE	☐		☐
REPAIR WELL	☐		☐
PULL OR ALTER CASING	☐		☐
MULTIPLE COMPLETE	☐		☐
CHANGE ZONES	☐		☐
ABANDON*	☐		☐
(other) SUPPLEMENTARY WELL HISTORY			

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

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

Drilled to 463'. Circulated 1/2 hr.

Ran and cemented 11 joints & 1 piece (433.19') of 13-3/8", 48#, H-40, 8RD, ST&C, new casing at 449.19' (guide shoe at 448.25' & float valve at 409.97') with 610 sx. cement. Preceded cement with 100 bbls. mud and 20 bbls. fresh water. Displaced with 66 bbls. fresh water. Bumped plug with 1000# and float held O.K. Circulated 264 sacks cement to surface. Maximum PDP 600# at 8.8 bpm. C.I.P. & J.C. at 11:55 p.m., 5-22-81. W.O.C.

Drilling at 4133' on 6-21-81.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED R. G. Ladd, Jr. TITLE District Drilling Superintendent DATE 6-22-81

(This space for Federal or State office use)

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

*See Instructions on Reverse Side

Form 9–331
Dec. 1973

Form Approved.
Budget Bureau No. 42–R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9–331–C for such proposals.)

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR
Union Oil Company of California

3. ADDRESS OF OPERATOR
P. O. Box 2620 - Casper, WY 82602

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1859' FNL & 2292' FEL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
U-12111

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
N.A.

7. UNIT AGREEMENT NAME
Brown's Peak Unit

8. FARM OR LEASE NAME
Federal

9. WELL NO.
1-G24

10. FIELD OR WILDCAT NAME
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 24, T.11S., R.4E.

12. COUNTY OR PARISH
Utah

13. STATE
Utah

14. API NO.
43-049-30009

15. ELEVATIONS (SHOW DF, KDB, AND WD)
7435' GR (Ungraded)

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	☐		☐
FRACTURE TREAT	☐		☐
SHOOT OR ACIDIZE	☐		☐
REPAIR WELL	☐		☐
PULL OR ALTER CASING	☐		☐
MULTIPLE COMPLETE	☐		☐
CHANGE ZONES	☐		☐
ABANDON*	☐		☐
(other) CHANGE PLANS			

(NOTE: Report results of multiple completion or zone change on Form 9–330.)

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.)*

Due to the well running approximately 2000' lower than the original formation top picks, it is anticipated that casing will be run and set at approximately 7600' rather than 5600'. The 9-5/8", 40#, S-80 & K-55, ST&C & LT&C, new casing will be run in place of the proposed 8-5/8" casing. The casing will be cemented back to approximately 4000' and the cement calculated after logging.

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
DATE: 7/21/81
BY: [illegible]

Subsurface Safety Valve: Manu. and Type _____ Ft.

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

SIGNED R. G. Ladd, Jr. TITLE District Drilling Superintendent DATE 7-16-81

(This space for Federal or State office use)

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

*See Instructions on Reverse Side

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

RECEIVED
AUG 1981
DIVISION OF OIL, GAS & MINING

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR
Union Oil Company of California

3. ADDRESS OF OPERATOR
P. O. Box 2620 - Casper, WY 82602

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1859' FNL & 2292' FEL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
U-12111

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
N.A.

7. UNIT AGREEMENT NAME
Brown's Peak Unit

8. FARM OR LEASE NAME
Federal

9. WELL NO.
1-G24

10. FIELD OR WILDCAT NAME
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 24, T.11S., R.4E.

12. COUNTY OR PARISH
Utah

13. STATE
Utah

14. API NO.
43-049-30009

15. ELEVATIONS (SHOW DF, KDB, AND WD)
7435' GR (Ungraded)

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	☐		☐
FRACTURE TREAT	☐		☐
SHOOT OR ACIDIZE	☐		☐
REPAIR WELL	☐		☐
PULL OR ALTER CASING	☐		☐
MULTIPLE COMPLETE	☐		☐
CHANGE ZONES	☐		☐
ABANDON*	☐		☐
(other) SUPPLEMENTARY WELL HISTORY			

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

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

Drilled to 5812'. Circulated and conditioned mud for DST.

DST No. 1 (Entrada) - 5788-5812'.
Opened tool for 30-min. initial preflow with weak blow and continued throughout. S.I. 60 mins. Opened for 60-min. final flow with weak blow decreasing to faint blow at end of flow period. No gas or fluid to surface. S.I. 120 mins. POOH and recovered 120' of 47° gravity oil and no water. IHP 2800#. IPFP 57#. FPFP (30) 66#. ISIP (60) 95#. IFP 76#. FFP (60) 76#. FSIP (120) 95#. FHP 2800#.

Drilling at 6331' on 7-22-81.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED R. G. Ladd, Jr. TITLE District Drilling Superintendent DATE 7-23-81

(This space for Federal or State office use)

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

*See Instructions on Reverse Side

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR
Union Oil Company of California

3. ADDRESS OF OPERATOR
P. O. Box 2620 - Casper, WY 82602

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1859' FNL & 2292' FEL (SW NE)
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
U-12111

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
N.A.

7. UNIT AGREEMENT NAME
Brown's Peak Unit

8. FARM OR LEASE NAME
Federal

9. WELL NO.
1-G24

10. FIELD OR WILDCAT NAME
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 24, T.11S., R.4E.

12. COUNTY OR PARISH
Utah

13. STATE
Utah

14. API NO.
43-049-30009

15. ELEVATIONS (SHOW DF, KDB, AND WD)
7435' GR (Ungraded)

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REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	☐		☐
FRACTURE TREAT	☐		☐
SHOOT OR ACIDIZE	☐		☐
REPAIR WELL	☐		☐
PULL OR ALTER CASING	☐		☐
MULTIPLE COMPLETE	☐		☐
CHANGE ZONES	☐		☐
ABANDON*	☐		☐
(other) SUPPLEMENTARY WELL HISTORY			

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

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.)*

7-22-81 through 8-20-81: Drilled from 6331' to 7354'.

RECEIVED
AUG 24 1981
DIVISION OF
OIL, GAS & MINING

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

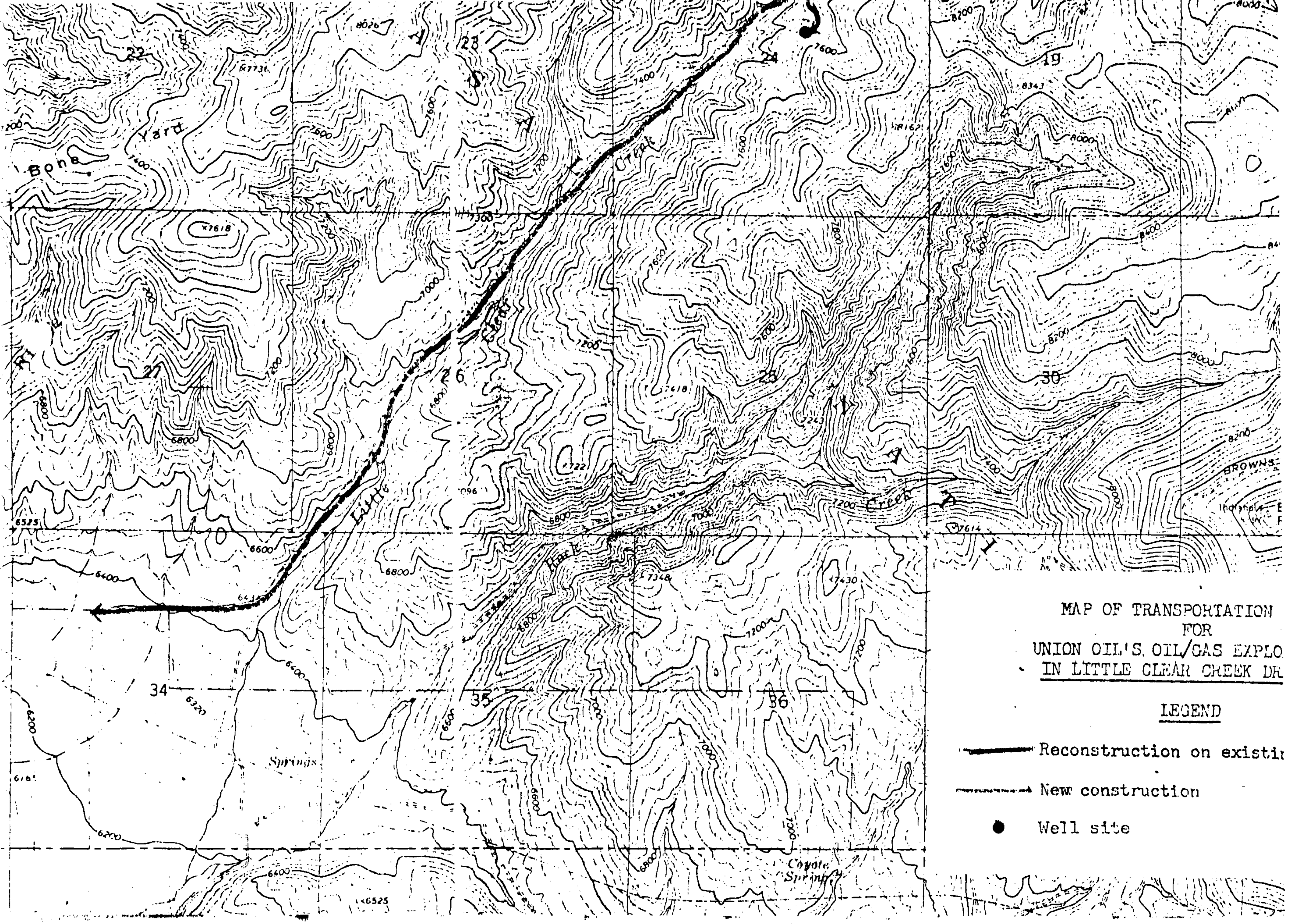
18. I hereby certify that the foregoing is true and correct

SIGNED R. G. Ladd, Jr. TITLE District Drlg. Superintendent DATE 8-21-81

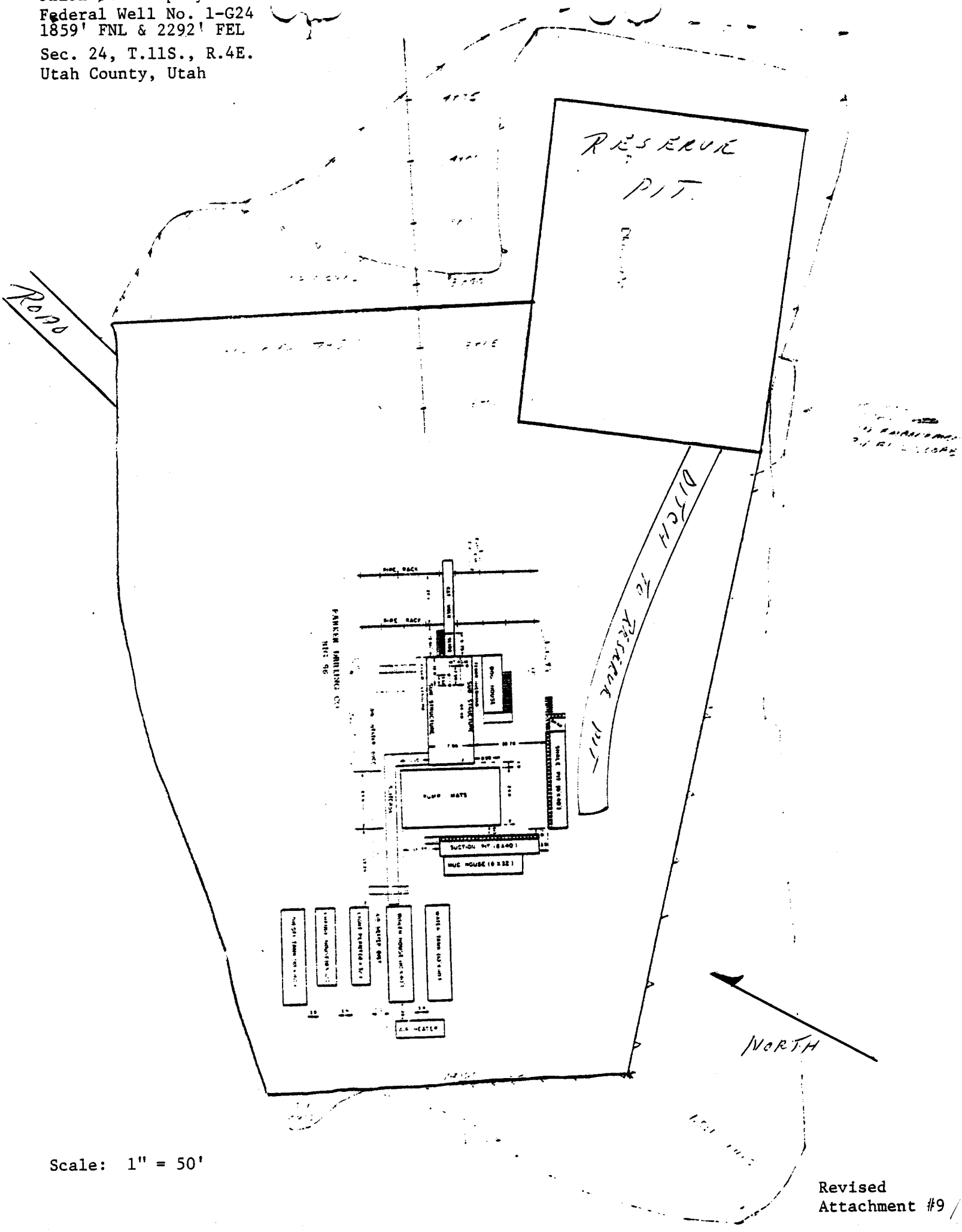
(This space for Federal or State office use)

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

*See Instructions on Reverse Side


MAP OF TRANSPORTATION
FOR
UNION OIL'S OIL/GAS EXPLO
IN LITTLE CLEAR CREEK DR
LEGEND
Reconstruction on existi
New construction
Well site
Bone Yard
Little Clear Creek
Creek
Springs
Coyote Spring
BROWNS
22
23
24
19
27
26
25
30
34
35
36

Union Oil Company of California
Federal Well No. 1-G24
1859' FNL & 2292' FEL
Sec. 24, T.11S., R.4E.
Utah County, Utah



Revised
Attachment #9

DIVISION OF OIL, GAS AND MINING

PLUGGING PROGRAM

NAME OF COMPANY: Union Oil — Glen Fredrick (h) 307-234-6252 (o) 307-234-1563

WELL NAME: Federal #1-G24

SECTION 24 TOWNSHIP 11S RANGE 4E COUNTY Utah

VERBAL APPROVAL GIVEN TO PLUG AND ABOVE REFERRED TO WELL IN THE FOLLOWING MANNER:

TOTAL DEPTH: 7474'

CASING PROGRAM:

20" @ 53'
13 5/8' @ 449'
12 1/4' @ Openhole in gage to 4700'
12-20" below

FORMATION TOPS:

Arpien	Surface-TD

PLUGS SET AS FOLLOWS:

1) 5900'-5700'
2) 2700'-2400'
3) 500'-400'
4) 50'-Surface

There was no water encountered, no cores, no perfs., no porosity, no LC zones, and one DST.

DST:
1) 5788-5812 (show)

Place 9.4#, 55 vis fresh water gel based abandonment mud between plugs; clean, restore, and regrade site, erect regulation dryhole marker.

DATE 8-26-81 SIGNED MTM M. J. Minder

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

RECEIVED
SEP 02 1981
DIVISION OF
OIL, GAS & MINING

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR
Union Oil Company of California

3. ADDRESS OF OPERATOR
P. O. Box 2620-Casper, WY 82602-2620

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1859' FNL & 2292' FEL (SW NE)
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
U-12111

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
N.A.

7. UNIT AGREEMENT NAME
Brown's Peak Unit

8. FARM OR LEASE NAME
Federal

9. WELL NO.
1-G24

10. FIELD OR WILDCAT NAME
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 24, T.11S., R.4E.

12. COUNTY OR PARISH
Utah

13. STATE
Utah

14. API NO.
49-049-30009

15. ELEVATIONS (SHOW DF, KDB, AND WD)
7435' GR (Ungraded)

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	☐		☐
FRACTURE TREAT	☐		☐
SHOOT OR ACIDIZE	☐		☐
REPAIR WELL	☐		☐
PULL OR ALTER CASING	☐		☐
MULTIPLE COMPLETE	☐		☐
CHANGE ZONES	☐		☐
ABANDON*	☐		☐
(other) SUPPLEMENTARY WELL HISTORY			

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

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

Drilled to 7386'. Circulated. Ran BHC Sonic w/GR & Caliper. Drilled to 7404'. Ran HDT Continuous Dipmeter, DLL-MSFL, and FDC-CNL. Ran sidewall cores and recovered two cores of five attempted shots at 7150' and 6818'. TIH to 7315'. Washed and reamed to 7404'. Drilled to 7493' T.D. on 8-26-81. TOOH with tight hole at 4970' to 4910'. Laid down BHA and TIH open-ended with tight hole from 4910' to 4970'. Circulated and conditioned hole. Ran Diplog from 4500' to 470'. TIH to 5900'. Circulated and conditioned hole.

Preparing to plug and abandon.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED Glenn C. Fredrick TITLE Drilling Engineer DATE 8-31-81

(This space for Federal or State office use)

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

*See Instructions on Reverse Side

OK

FILE IN TRIPLICATE
FORM OGC-8-X

RECEIVED
SEP 08 1981
DIVISION OF
OIL, GAS & MINING

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
1588 West North Temple
Salt Lake City, Utah 84116

REPORT OF WATER ENCOUNTERED DURING DRILLING

Well Name & Number Federal Well No. 1-G24

Operator Union Oil Company of California Address P. O. Box 2620-Casper, WY 82602

Contractor Parker Drilling Company Address P. O. Box 1030, Mills, WY 82644

Location SW ¼ NE ¼ Sec. 24 T. 11S. R. 4E. County Utah

Water Sands

	Depth		Volume	Quality
	From	To	Flow Rate or Head	Fresh or Salty
1.	Surface - 7493' T.D.		No Water Was Encountered	
2.				
3.				
4.				
5.				

(Continue on reverse side if necessary)

Formation Tops

Arapien - Surface to T.D.

Remarks

Well was plugged and abandoned.

NOTE: (a) Report on this form as provided for in Rule C-20, General Rules and Regulations and Rules of Practice and Procedure.
(b) If a water analysis has been made of the above reported zone, please forward a copy along with this form.

8-31-81

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

P&A

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☐ other P & A

2. NAME OF OPERATOR
Union Oil Company of California

3. ADDRESS OF OPERATOR
P. O. Box 2620 - Casper, WY 82602-2620

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1859' FNL & 2292' FEL
AT TOP PROD. INTERVAL: N.A.
AT TOTAL DEPTH: Straight Hole

5. LEASE
U-12111

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
N.A.

7. UNIT AGREEMENT NAME
Brown's Peak Unit

8. FARM OR LEASE NAME
Federal

9. WELL NO.
1-G24

10. FIELD OR WILDCAT NAME
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 24, T.11S., R.4E.

12. COUNTY OR PARISH
Utah

13. STATE
Utah

14. API NO.
43-049-30009

15. ELEVATIONS (SHOW DF, KDB, AND WD)
7435' GR (Ungraded)

RECEIVED
SEP 16 1981
DIVISION OF
OIL, GAS & MINING

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	☐		☐
FRACTURE TREAT	☐		☐
SHOOT OR ACIDIZE	☐		☐
REPAIR WELL	☐		☐
PULL OR ALTER CASING	☐		☐
MULTIPLE COMPLETE	☐		☐
CHANGE ZONES	☐		☐
ABANDON*	☐		☒
(other)			

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

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.)*

7493' T.D.

PLUGGED AND ABANDONED SUBJECT WELL AS FOLLOWS:

Spotted cement plugs as follows: Plug No. 1 - 175 sacks - 5900-5700'
Plug No. 2 - 950 sacks - 2700-2400'
Plug No. 3 - 75 sacks - 500-400'
Plug No. 4 - 35 sacks - 50'-Surface

Cut off 13-3/8" casing 3' below ground level and welded cap on. As requested by the Forest Service, no dry hole marker was installed. Released rig at 11:59 p.m., 8-31-81. Union Oil Company will notify USGS by sundry notice upon completion of clean-up and rehabilitation work. Well plugged and abandoned on 8-31-81.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED R. B. Ladd, Jr. TITLE District Drilling Superintendent DATE 9-14-81

(This space for Federal or State office use)

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

*See Instructions on Reverse Side

Form 9-330
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE* (See other instructions on reverse side)

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

7

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. LEASE DESIGNATION AND SERIAL NO.: U-12111

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N.A.

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other P & A

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

RECEIVED
SEP 21 1981
DIVISION OF OIL, GAS & MINING

7. UNIT AGREEMENT NAME: Brown's Peak Unit

8. FARM OR LEASE NAME: Federal

2. NAME OF OPERATOR: Union Oil Company of California

9. WELL NO.: 1-G24

3. ADDRESS OF OPERATOR: P. O. Box 2620 - Casper, WY 82602-2620

10. FIELD AND POOL, OR WILDCAT: Wildcat

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements.*)
At surface: 1859' FNL & 2292' FEL (SW NE)
At top prod. interval reported below: N.A.
At total depth: 1859' FNL & 2292' FEL

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec. 24, T.11S., R.4E.

14. PERMIT NO.	DATE ISSUED	12. COUNTY OR PARISH	13. STATE
43-049-30009	11-29-79	Utah	Utah

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
5-9-81*	8-26-81	P & A, 8-31-81	7435' GR (Ungrd)	- - - -

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
7493' TD	Surface		→	0 - T.D.	- - -

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: NONE

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: BHC Sonic w/GR & Caliper, HDT Continuous Dipmeter, DLL-MSFL & FDC-CNL

27. WAS WELL CORED: No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
20"	94#	53'	30"	225 sx.	- - -
13-3/8"	48#	449'	17-1/2"	610 sx.	- - -

29. LINER RECORD

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

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
- - -	- - -	- - -

31. PERFORATION RECORD (*Interval, size and number*): None

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
- - -	- - -

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
- - - - -	- - - -	Plugged & Abandoned

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
- - -	- - -	- - -		- - -	- - -	- - -	- - -

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
- - -	- - -		- - -	- - -	- - -	- - -

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*): N.A.

TEST WITNESSED BY: N.A.

35. LIST OF ATTACHMENTS: None

*MIRU rotary rig on 5-18-81.

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

SIGNED R. G. Ladd, Jr. TITLE District Drilling Supt. DATE 9-18-81

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

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.
If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.
Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.
Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.
Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.
Item 29: *"Sacks Cement":* Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.
Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

Note: Blowout preventers tested daily in accordance with Union Oil Company policy and reported by drilling contractor on tour sheets.

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

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
"Entrada"	5788'	5812'	DST #1: Op. tool for 30-min. IPF w/weak blow & cont'd. throughout. S.I. 60 mins. Op. for 60-min. final flow w/weak blow decreasing to faint blow at end of flow period. No gas or fluid to surface. S.I. 120 mins. POOH & rec. 120' of 47° gravity oil & no water. IHP 2800#. IPFP 57#. FPFP (30) 66#. ISIP (60) 95#. IFP 76#. FFP (60) 76#. FSIP (120) 95#. FHP 2800#.
			Plugged and abandoned as follows: Spotted cement plugs as follows: Plug #1 - 175 sx - 5900-5700' Plug #2 - 950 sx - 2700-2400' Plug #3 - 75 sx - 500-400' Plug #4 - 35 sx - 50'-Surface Cut of 13-3/8" casing 3' below G.L. and welded cap on. At request of Forest Service, no dry hole marker was installed. Released rig on 8-31-81. Plugged and abandoned on 8-31-81.

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
Arapien	2050'	
"Entrada"	4920'	
Carmel	6815'	

U.S. GOVERNMENT PRINTING OFFICE: 1963—O-683636

GPO 680-147