Form 9-331 C
(May 1963)

Please Expedite.

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 [ ] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: R. L. Jacobs Oil & Gas Co.

3. ADDRESS OF OPERATOR: 2467 Commerce St., Grand Junction, Colo. 81501

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: SE. NW. Sec. 24, T 20S, R 23E, S.L.M.
At proposed prod. zone: ~~1836~~ 1000' fr. W-line and ~~1780~~ 2280' fr. N-line

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: Approximately 5 miles N.E. of Cisco, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 516'

16. NO. OF ACRES IN LEASE: 120

17. NO. OF ACRES ASSIGNED TO THIS WELL: 160 (40 ac. fr. P.O.& G)

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: 2200'

19. PROPOSED DEPTH: 2150'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 4628 Grd.

22. APPROX. DATE WORK WILL START*: May 30, 1979

5. LEASE DESIGNATION AND SERIAL NO.: U-8659

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Federal

9. WELL NO.: #24-2

10. FIELD AND POOL, OR WILDCAT: Cisco Springs

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: SE.NW. Sec 24-20S-23E S.L.M.

12. COUNTY OR PARISH: Grand

13. STATE: Utah

RECEIVED JUN 1 1979 DIVISION OF OIL, GAS & MINING

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
9 3/4"	7 5/8"	24.00#	150 Ft.	75 sks.

It is planned to drill a well at the above location to test the gas production possibilities of the sands in the Dakota, Cedar Mt., and Morrison formations. The well will be drilled to a point which is near the top of the Entrada formation or to commercial production, whichever is at the lesser depth. The well will be drilled with rotary tools, using air for circulation. The surface casing will be set at about 150 ft., and cemented with returns to the surface. A blowout preventer with hydraulically operated blind and pipe rams will be installed on top of the surface casing; and a rotating head will be used on top of the blowout preventer. Fill and kill lines (2") will be connected below the blind rams. Any gas encountered will be flared at the end of the blewie line, and roughly checked for volume thru 2" line after the pipe rams have been closed. A float valve will be used in the bottom drill collar at all times. A prognosis for the well is attached.

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 Ross Jacobs TITLE Operator DATE April 9, 1979

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY W P Martens TITLE ACTING DISTRICT ENGINEER DATE MAY 31 1979

CONDITIONS OF APPROVAL, IF ANY:

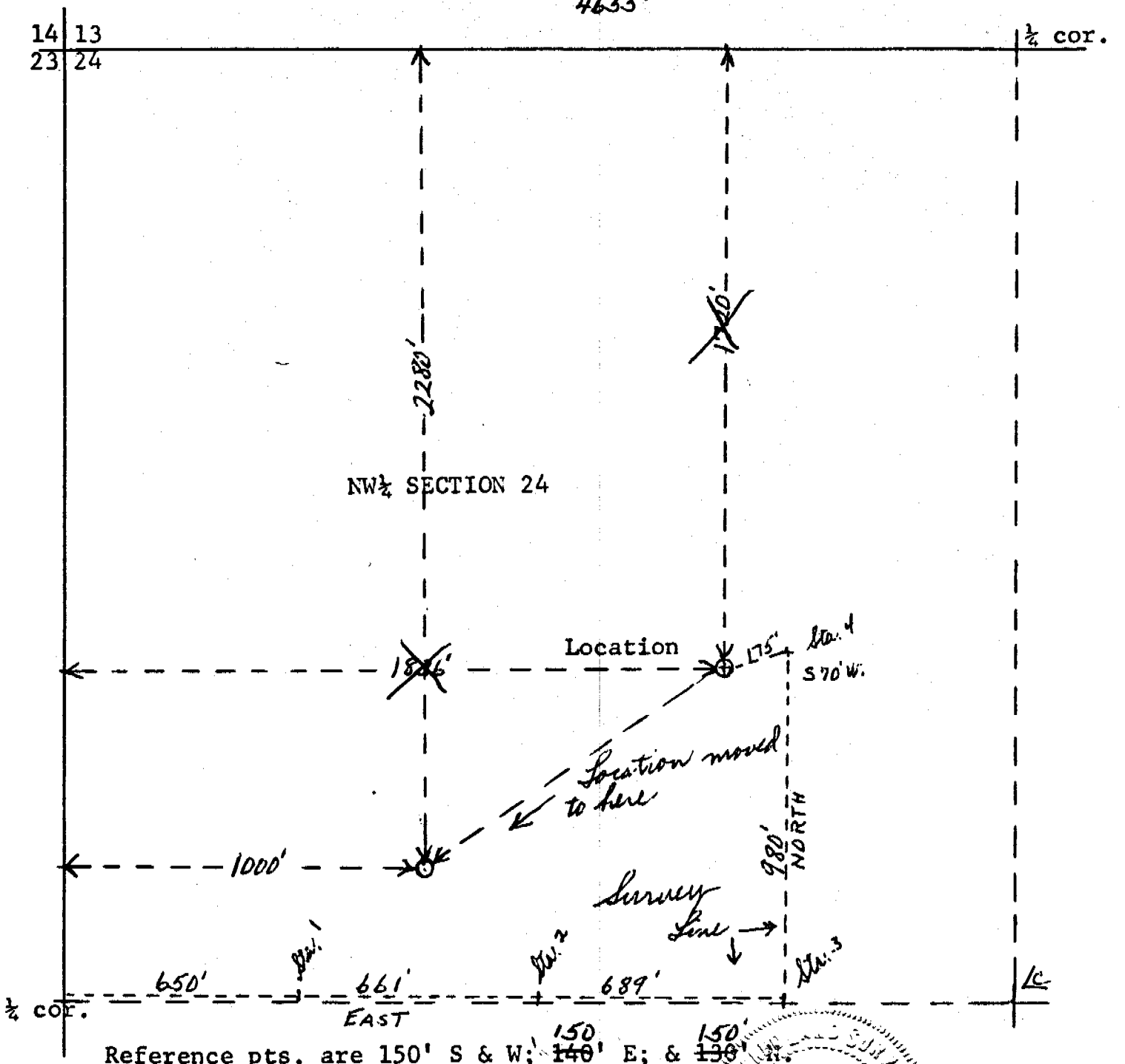
CONDITIONS OF APPROVAL ATTACHED TO OPERATOR'S COPY

State O&G

NOTICE OF APPROVAL
*See Instructions On Reverse Side

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

LOCATION PLAT FOR
R. L. JACOBS OIL & GAS COMPANY
FEDERAL #24-2 WELL
SW. ~~SE.~~ NW. SEC. 24-20S-23E
GRAND COUNTY, UTAH
(~~1836~~ 1000' fr. W-line and ~~1720~~ 2280' fr. N-line)
Elev.: ~~4628~~ 4655' Grd.



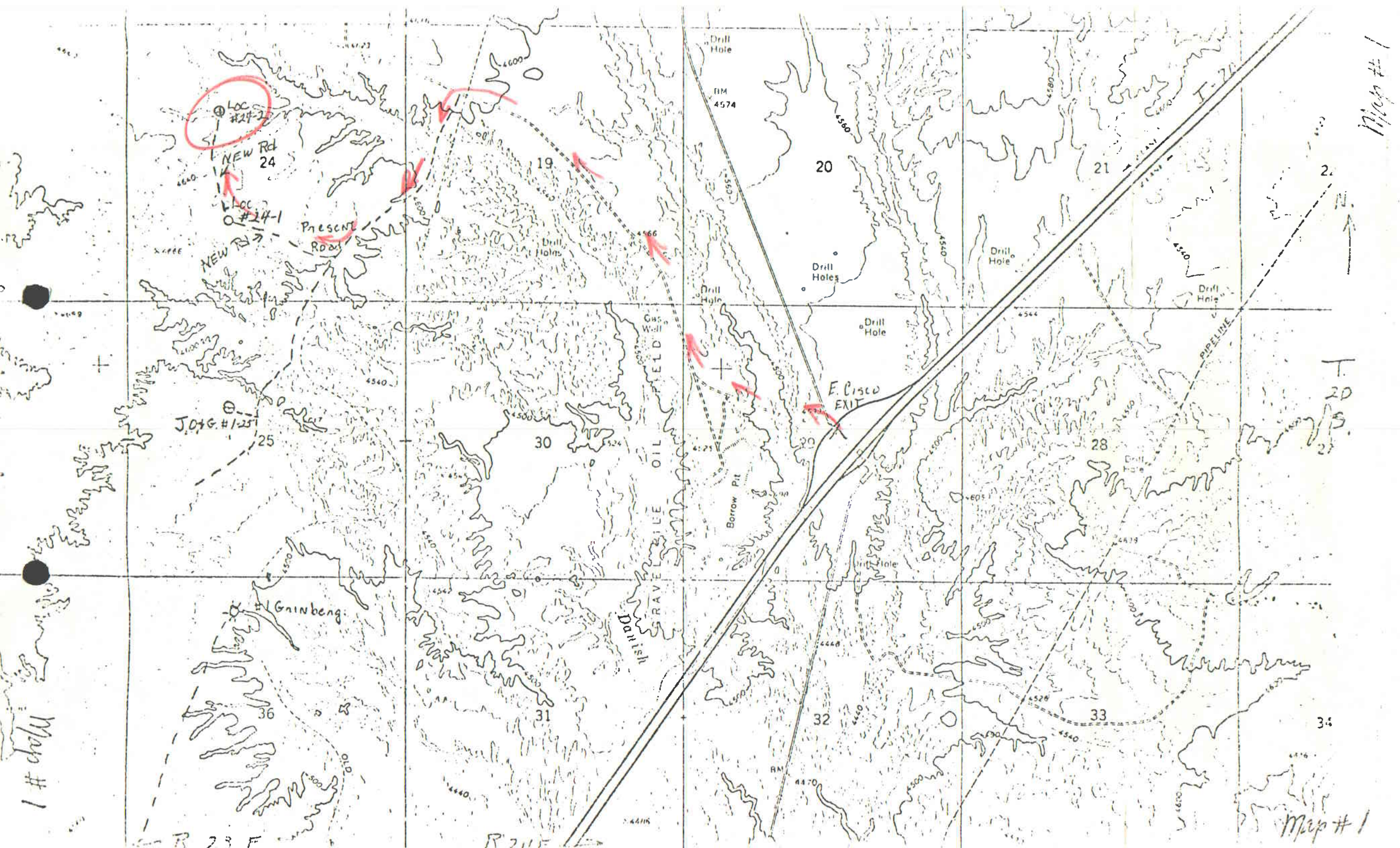
Reference pts. are 150' S & W; 150' ~~140~~' E; & 150' ~~130~~' N.

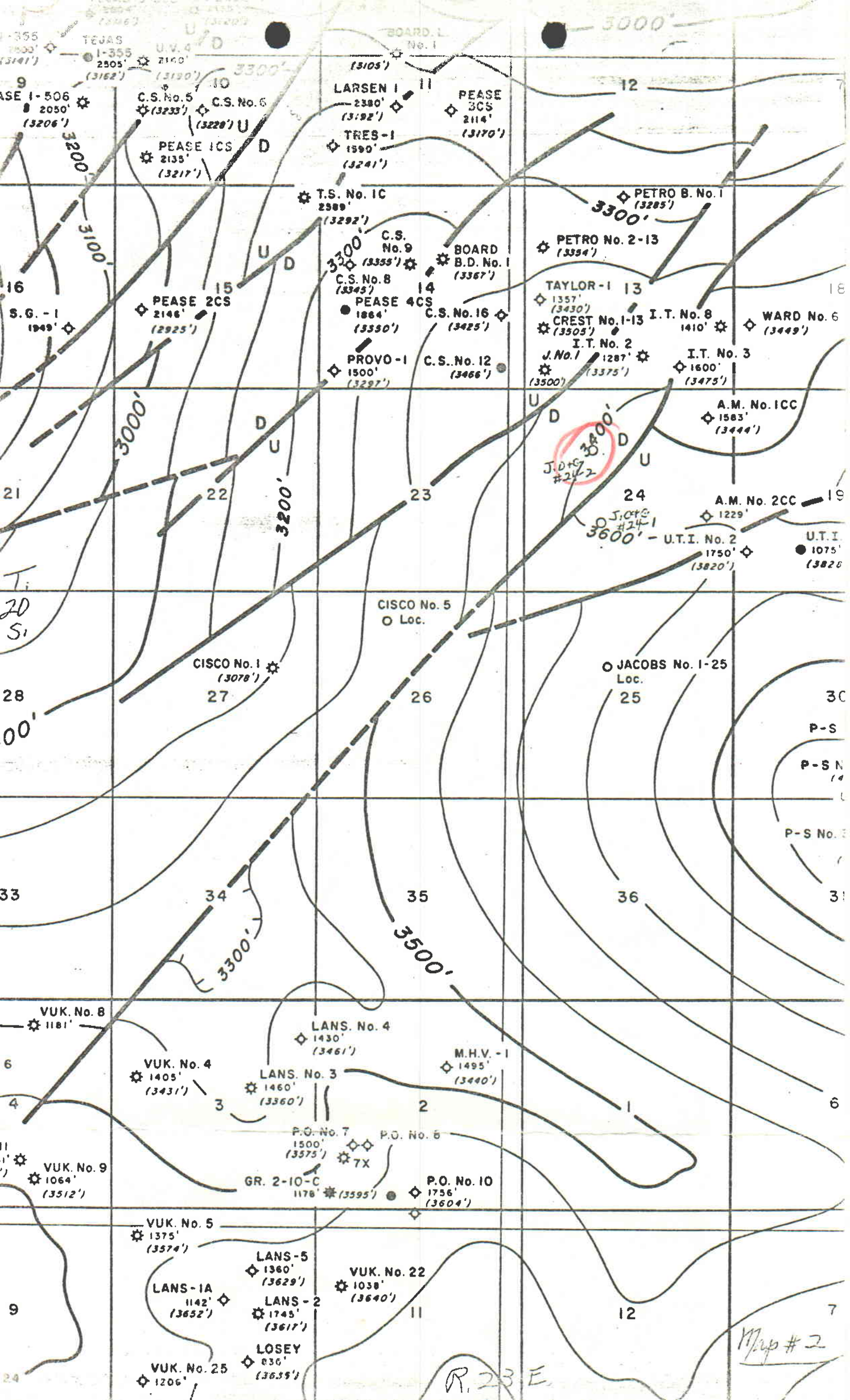
I, Sherman D. Gardner, do hereby certify that this plat was plotted from notes of a field survey made under my direct responsibility, supervision and checking on April 7, 1979.

Sherman D. Gardner

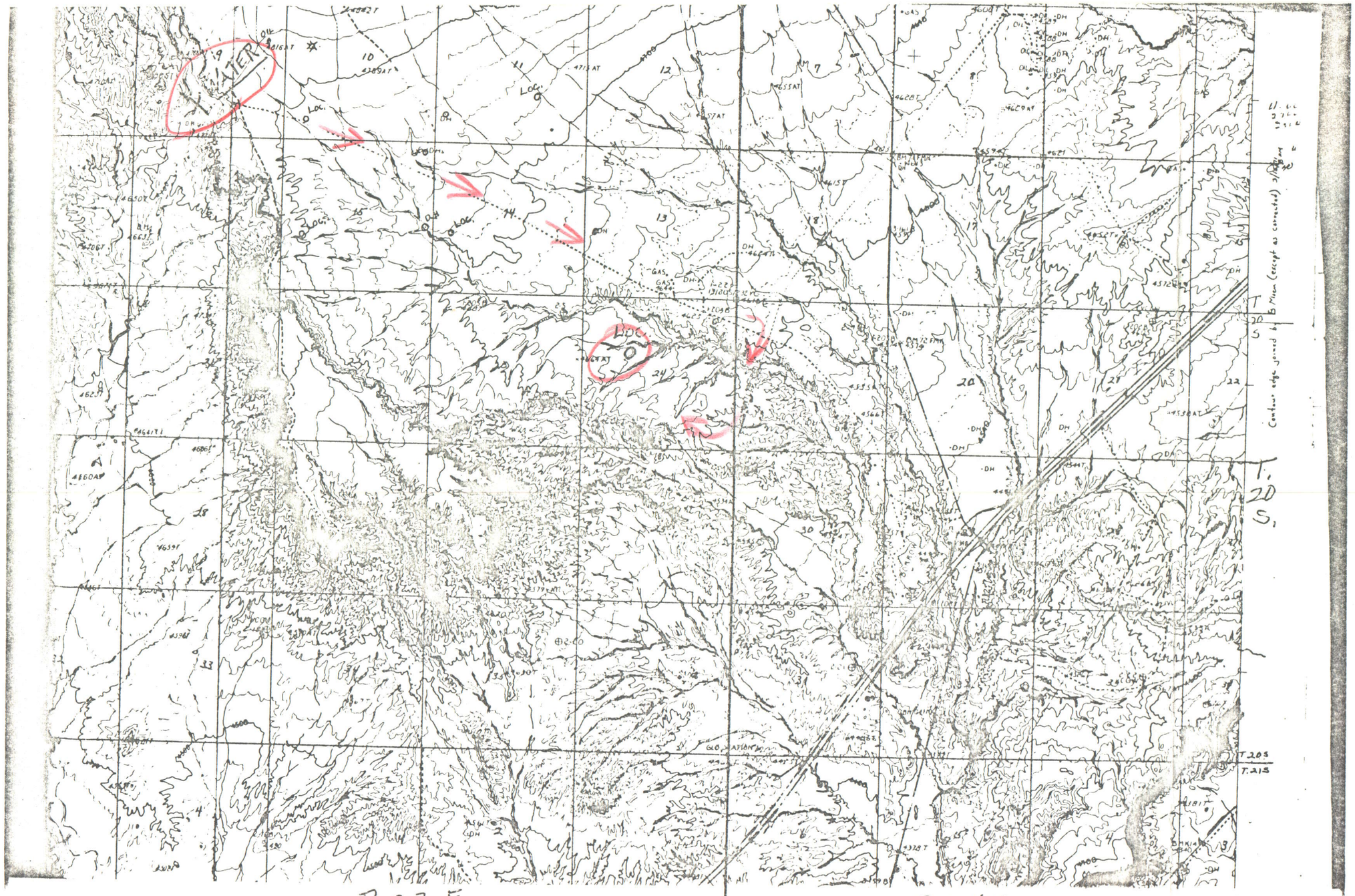
Scale: 1 in. = 400 ft.
Date: April 7, 1979

Plat No. 1


Map #1
Loc #24-2
NEW Rd
24
Loc #24-1
Present Rd
NEW Rd
19
20
21
Drill Hole
BM 4574
Drill Holes
Drill Hole
Drill Holes
Drill Hole
Drill Hole
Drill Hole
Drill Hole
Gas Well
OIL FIELD
GRAVEL PIT
Borrow Pit
E. Cisco EXIT
I-70
PIPELINE
N.
T. 20 S.
J.O.G. #1-25
25
30
28
Grinberg
Danish
36
31
32
33
34
R 23 E
R 24 E
1 # drill
Map #1


TEXAS I-355 2505' (3162')
U.V. 4 2160' (3190')
BOARD. L No. 1 (3105')
3000'
3300'
ASE I-506 2050' (3206')
C.S. No. 5 (3233')
C.S. No. 6 (3228')
LARSEN I 2380' (3192')
PEASE 3CS 2114' (3170')
PEASE 1CS 2135' (3217')
TRES-1 1590' (3241')
3200'
T.S. No. 1C 2589' (3292')
PETRO B. No. 1 (3285')
3100'
C.S. No. 9 (3355')
BOARD B.D. No. 1 (3367')
PETRO No. 2-13 (3354')
C.S. No. 8 (3345')
PEASE 4CS 1864' (3350')
TAYLOR-1 1357' (3430')
S.G.-1 1949'
PEASE 2CS 2146' (2925')
C.S. No. 16 (3425')
CREST No. 1-13 (3505')
I.T. No. 8 1410'
WARD No. 6 (3449')
I.T. No. 2 1287' (3375')
J. No. 1 (3500')
PROVO-1 1500' (3297')
C.S. No. 12 (3466')
I.T. No. 3 1600' (3475')
A.M. No. 1CC 1583' (3444')
3400'
J.D+G #24-2
J.D+G #24-1
A.M. No. 2CC 1229'
3600'
U.T.I. No. 2 1750' (3820')
U.T.I. 1075' (3826
CISCO No. 5 Loc.
CISCO No. 1 (3078')
JACOBS No. 1-25 Loc.
P-S
P-S N
P-S No.
3500'
VUK. No. 8 1181'
LANS. No. 4 1430' (3461')
M.H.V.-1 1495' (3440')
VUK. No. 4 1405' (3431')
LANS. No. 3 1460' (3360')
P.O. No. 7 1500' (3575')
P.O. No. 6
7X
VUK. No. 9 1064' (3512')
GR. 2-10-C 1178' (3595')
P.O. No. 10 1756' (3604')
VUK. No. 5 1375' (3574')
LANS-5 1360' (3629')
VUK. No. 22 1038' (3640')
LANS-1A 1142' (3652')
LANS-2 1745' (3617')
LOSEY 836' (3635')
VUK. No. 25 1206'
R. 23 E.
Map #2

Map #3



Map #3

U. S. GEOLOGICAL SURVEY - CONSERVATION DIVISION

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

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

SUBJECT: APD MINERAL EVALUATION REPORT LEASE NO. U-8659

OPERATOR: R.L. Jacobs Oil & Gas Co. WELL NO. 24-2

LOCATION: ___ ¼ SE ¼ NW ¼ sec. 24, T. 20S, R. 23E, SLM

Grand County, Utah

1. Stratigraphy: Operator's stratigraphy is reasonable.

2. Fresh Water: Usable water may be present in sands of Mancos

3. Leasable Minerals: Prospectively valuable for coal in the Dakota form.

4. Additional Logs Needed: Run operator's logs through Dakota to identify coal.

5. Potential Geologic Hazards: None expected.

6. References and Remarks: Map I-736, WRD report # 31

Signature: Candace C. Clark Date: 5-20-79

Oil and Gas Drilling

No. 308-79

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

Usual Environmental Analysis

Lease No. U-8569

Operator R. L. Jacobs Oil & Gas Company Well No. 24-2

Location 1836' FWL & 1720' FNL Sec. 24 T. 20S R. 23E.

County Grand State Utah Field Cisco Springs

Status: Surface Ownership Public Minerals Federal

Joint Field Inspection Date May 15, 1979

Participants and Organizations:

George Diwachak	U.S. Geological Survey Salt Lake City,
Bob Kershaw	Bureau of Land Management, Moab
Beth Coker	Bureau of Land Management, Moab
Lynn Collins	R. L. Jacobs Oil & Gas Company
W. Don Quigley	Consultant Geologist

Related Environmental Analyses and References:

(1) Unit Resource Analysis, Book Mountain Planning Unit, BLM, Moab

(2)

Pad 180 x 350
Pit 25 x 100
4000' 20' access
Upgrade oil prod. for #24-1
Flow line and tank
Stock tank, horizontal
2.9 [illegible]
Fig 6 [illegible]
Shipping

Analysis Prepared By: George Diwachak
Environmental Scientist
Salt Lake City, Utah

Date: May 17, 1979

Noted - G. Diwachak

Proposed Action:

On April 16, 1979, R. L. Jacobs Oil and Gas Company filed an Application for Permit to Drill the No. 24-2 development well, a 2150-foot gas test of the Dakota, Cedar Mountain and Morrison Formations; located at an elevation of 4628 ft. in the SE/4 NW/4 Section 24, T. 20S., R. 23E. on Federal mineral lands and public surface; lease No. U-8659. There was no objection raised to the wellsite nor to the access road.

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

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

The operator proposes to construct a drill pad 180 ft. wide by 250 ft. long and a reserve pit 25 ft. by 100 ft. A new access road would be bladed 20 ft. wide by 4000 ft. long from the No. 24-1 well in the SE/4 SW/4 Section 24, T. 20S., R. 23E. If production is established, the roads would be crowned and ditched to the above mentioned specifications. Plans for a gas flow line would also be submitted to the appropriate agencies for approval. The operator proposes to construct production facilities on disturbed area of the proposed pad.

Location and Natural Setting:

The proposed drillsite is approximately 5 miles northeast of Cisco, Utah, the nearest town. A fair road runs to within 2.8 miles of the location. This well is in the Cisco Springs field.

Topography:

Area topography is flat to gently undulating, dissected by numerous intermittent drainages. The location is situated on a fairly level area near the edge of a point.

Geology:

The surface geology is Mancos shale. The soil is sandy clay. No geologic

hazards are known near the drillsite. Seismic risk for the area is minor. Anticipated geologic tops are filed with the 10-Point Subsurface Protection Plan.

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

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

A geologic review of the proposed action has been furnished by the Area Geologist, U.S. Geological Survey, Salt Lake City, Utah.

The operator's drilling, cementing, casing and blowout prevention programs have been reviewed by the Geological Survey engineers and determined to be adequate.

Soils:

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

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

Approximately 2.9 acres of land would be stripped of vegetation. This would increase the erosional potential. Proper construction practice, construction of water bars, reseeding of slope-cut area would minimize this impact.

Air:

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

Relatively heavy traffic would be anticipated during the drilling-operations phase, increasing dust levels and exhaust pollutants in the area. If the well was to be completed for production, traffic would be reduced substantially to a maintenance schedule with a corresponding decrease of dust levels and exhaust pollutants to minor levels. If the project results in a dry hole, all operations and impact from vehicular traffic would cease after abandonment. Due to the limited number of service vehicles and limited time span of their operation, the air quality would not be substantially reduced.

Toxic or noxious gases would not be anticipated.

Precipitation:

Annual rain fall should range from about 8 to 11" at the proposed location. The majority of the numerous drainages in the surrounding area are of a non-perennial nature flowing only during early spring runoff and during extremely heavy rain storms. This type of storm is rather uncommon as the normal annual precipitation is around 8".

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

Surface Water Hydrology:

Drainage from the location would be toward Cisco Wash and Danish Wash, non-perennnial tributaried of the Colorado River.

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

Ground Water Hydrology:

Some minor pollution of ground water systems would occur with the introduction of drilling fluids (filtrate) into the aquifer. This is

normal and unavoidable during rotary drilling operations. The potential for communication, contamination and comingling of formations via the well bore would be possible. The drilling program is designed to prevent this. There is need for more data on hydrologic systems in the area and the drilling of this well may provide some basic information as all shows of fresh water would be reported. Water production with the gas would require disposal of produced water per the requirements of NTL-2B. The depths of fresh water formations are listed in the 10-Point Subsurface Protection Plan. The pits would be unlined. If fresh water should be available from the well, the owner or surface agency may request completion as a water well if given approval.

Vegetation:

Location vegetation consists of sagebursh, greasewood, shadscale, milkvetch, cacti and grasses.

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

Proposed action would remove about 2.9 acres of vegetation. Removal of vegetation would increase the erosional potential and there would be a minor decrease in the amount of vegetation available for grazing.

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

Wildlife:

The fauna of the area consists predominantly of mule deer, coyotes, rabbits, foxes, and varieties of small ground squirrels and other types of rodents and various types of reptiles. The area is used by man for the primary purpose of grazing domestic livestock and sheep. The birds of the area are raptors, finches, ground sparrows, magpies, crows, and jays.

An animal and plant inventory has been made by the BLM. No endangered plants or animals are known to inhabit the project area.

Social-Economic Effect:

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

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

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

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

The economic effect on one well would be difficult to determine. The overall effect of oil and gas drilling and production activity are significant in Grand County.

But should this well discover a significant new hydrocarbon source, local, state, and possible national economics might be improved. In this instance, other development wells would be anticipated, with substantially greater environmental and economic impacts.

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

There are no national, state, or local parks, forests, wildlife refuges or ranges, grasslands, monuments, trails or other formally designated recreational facilities near the proposed location.

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

Waste Disposal:

The mud and reserves pits would contain all fluids used during the drilling operations. A trash pit would be utilized for any solid wastes

generated at the site and would be buried at the completion of the operations. Sewage would be handled according to State sanitary codes. For further information, see the 13-Point Surface Plan.

Alternative to the Proposed Action:

(1) Not approving the proposed permit-The oil and gas lease grants the lessee exclusive right to drill for, mine, extract, remove and dispose of all oil and gas deposits. Under leasing provisions, the Geological Survey has an obligation to allow mineral development if the environmental consequences are not too severe or irreversible. Upon rehabilitation of the site, the environmental effects of this action would be substantially mitigated, if not totally annulled. Permanent damage to the surface and subsurface would be prevented as much as possible under USGS and other controlling agencies supervision with rehabilitation planning reversing almost all effects. Additionally, the growing scarcity of oil and gas should be taken into consideration. Therefore, the alternative of not proceeding with the proposed action at this time is rejected.

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

(3) Drilling should be allowed provided the following mitigative measures are incorporated into the proposed APD and adhered to by the operator.

(a) The topsoil should be stockpiled on the west edge of the pad.

(b) The blooey line should be misted with water if any massive dust problems are encountered during drilling.

Adverse Environmental Effects Which Cannot Be Avoided:

Surface disturbance and removal of vegetation from approximately 2.9 acres of land surface for the lifetime of the project which would result in increased and accelerated erosional potential. Grazing would be eliminated in the disturbed areas and there would be a minor and temporary disturbance of wildlife and livestock. Minor induced air pollution due to exhaust emissions from rig engines of support traffic engines would occur. Minor increase in dust pollution would occur due to vehicular traffic associated with the operation. If the well is a gas producer,

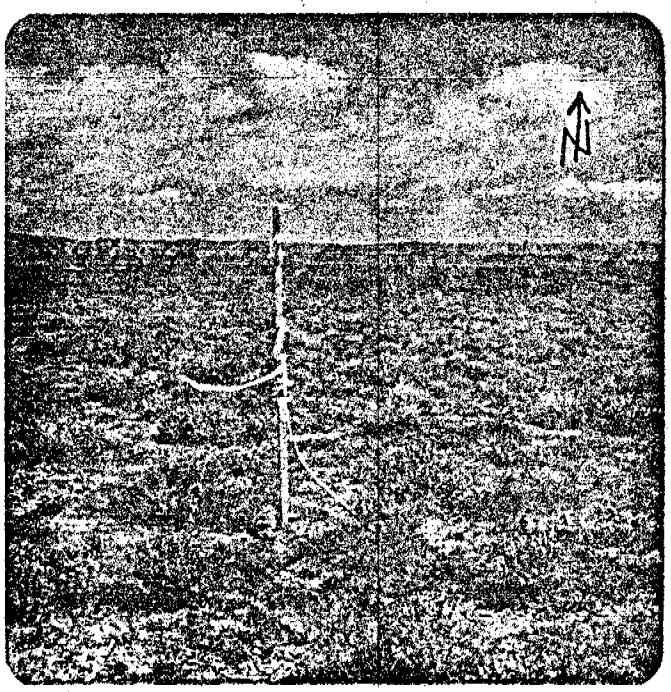
additional surface disturbance would be required to install production pipelines. The potential for fires, gas leaks, and spills of oil and water would exist. During the construction and drilling phases of the project, noise levels would increase. Potential for sub-surface damage to fresh water aquifers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

Determination:

This requested action ~~does~~/does not constitute a major Federal action significantly affecting the environment in the sense of NEPA, Section 102(2)(C).

Date 5/29/79

District Engineer
U.S. Geological Survey
Conservation Division
Oil and Gas Operations
Salt Lake City District



PROGNOSIS FOR
R. L. JACOBS OIL & GAS CO.
FEDERAL #24-2 WELL

Location: SE. NW. Sec. 24, T 20S, R 23E, S.L.M., Grand County, Utah (1836' from W-line and 1720' from N-line)

Elevations: 4628' Grd.; 4638' K.B.

Surface Casing: 150' of 7 5/8", 24.00#, K-55, R-3 casing set and cemented with 75 sks cement w/3% CaCl; with returns to surface. The surface hole (9 3/4") will be drilled to 150 ft. K.B. and will be no more than 1° deviation.

Expected Formation Tops:

Formation	Depth to Top	Thickness	Datum
Mancos	Surface	1238'	4638' K.B.
Dakota *	1238'	102'	3400'
Cedar Mountain *	1340'	90'	3298'
Morrison (Brushy Basin) *	1430'	280'	3208'
(Salt Wash) *	1710'	250'	2928'
Curtis-Summerville	1960'	80'	2678'
Entrada	2040'	—	2598'
Total Depth	2150'		

* Formations with possible hydrocarbons in paying amounts

1. It is planned to drill a 9 3/4" surface hole for the surface casing down to a depth of about 150 ft. and set 7 5/8 inch casing with approx. 75 sks of cement with returns to the surface. A casing head or flange will be mounted on top of the surface casing and a blowout preventer with blind and pipe rams (hydraulic) will be mounted on the casing head. A rotating head will then be mounted on top of the blowout preventer. A blewie line, at least 125 ft. long, will then be attached to the rotating head and extended into the reserve pit. B.O.P. will be tested to 2000 lbs. before drilling below surface casing.

2. A 6½" hole will then be drilled below the surface casing, using air for circulation. A flare will be maintained at 500' and below. This will insure that no gas will be missed. The air drilling will

also minimize the damage to the hydrocarbon reservoir. No toxic gases have ever been encountered in this area and none are expected.

3. Samples of the cuttings will begin at 500'. 30-ft. samples will be taken from 500' to 800', and then 10-ft. samples will be taken from 800' to total depth.

4. It is planned to drill the well to a depth which is approximately 100 feet below the top of the Entrada formation unless good commercial flow of gas is obtained above this depth.

5. If a high gas flow (several million cubic feet) and/or when the total depth of the well is reached, electric logs will be run. Prior to running logs, high viscosity mud (not less than 100 vis.) will be pumped into the hole to provide control of the gas and to provide a conductive medium for the logs. A dual-induction-laterolog will be run from bottom to the top of the hole, and a gamma-density and compensated neutron porosity log will be run from the bottom to a point which is 150' above the top of the Dakota formation.

6. If good production (over 750 MCF) is obtained, 4½" O.D., 10.50#, K-55, R-3 new casing will be run and cemented conventionally with sufficient R.F.C. cement to cover 200 ft. above the top of the Dakota formation. The production zone will then be perforated, 2 3/8" O.D. tubing run, and completed conventionally.

7. It is anticipated that the drilling of the well will require less than one week.

W. Don Quigley

W. Don Quigley
Consulting Geologist
Suite 440
57 West South Temple
Salt Lake City, Utah 84101

Form: DQ-1-79

N T L - 6 P L A N R E P O R T

For

Well Name: Jacobs - Federal #24-2

Location: SE. NW. Sec. 24, T 20S, R 23E, S.L.M., Grand County, Utah

1. Existing Roads: (See attached Maps)

A. Well Location: (See Plat #1)

Reference Stakes: 150' S. & W.; 140' E.; and 130' N.

Perimeter Stakes: As above. Stakes outline maximum perimeter of well pad.

B. Route and Distance to Well Site From Reference Point: (See att. maps) From the E. Cisco Exit on I-70, the site is 4 miles along secondary and unimproved roads on Cisco Mesa.

C. Access Roads (Identify secondary roads to be used): (See att. maps) The Cisco Mesa road going NW. from the E. Cisco Exit is used for the first 2 miles. At a point where the old abandoned railroad bed crosses this road, an old road (now used) takes off to the southwest. This road is followed for a distance of approximately one mile. Then a new road (which is flagged) will be built to the NW. for a distance of about 3/4 mile to the well site.

D. Roads Within 3 mile Radius: (See att. maps) The main Cisco Mesa road (first 2 miles) is a county road, is partially gravelled, graded, crowned, and ditched. All the other roads around the well site are unimproved and are flat with no drainage provisions. The last 2 miles of road is a trail with no improvement. It is on Mancos soil & topography and is on shale and silt in the low areas and on gravel across the benches. It crosses Cisco Wash and has grades of about 6% on both sides of the wash.

Surface type and conditions:

E. Roads Within 1 mile Radius: (See att. maps) See 1-D Above. The roads within 1-mile of the site are mostly dozed trails (old seis trails) dozed across natural topography and soil. The road base is Mancos shale and soil with some gravel and conglomerate on the bench areas. They are normally about 10 ft. wide.

F. Plans for Road Improvement & Maintenance: The last two miles of road will be widened to a maximum disturbed width of 20' and flatgraded with the dirt pushed to the sides. The portion on the slopes on the

F. banks of the Cisco Wash will be ditched on the bank side to provide drainage. Likewise a portion near the well site is across a small wash and will be ditched on both sides of the road. The road base will be cut to the bottom of several shallow washes. There are about 3 of these washes and the cuts will be short (20' or less) and 4' deep at the most.

2. Planned Access Roads: (See att. maps) About 4000' of new road will be built across fairly level Mancos terrain by blading a path with a bulldozer

(1) Width: Maximum disturbed width will be 20 ft.

(2) Maximum Grades: 6% or less

(3) Turnouts: None needed.

(4) Drainage Design: None needed

(5) Location and Size of Culverts, Cuts, and Fills: None needed

(6) Surfacing Material: The road is across Mancos shale and soil which is composed of gravel and silt. No other material will be used.

(7) Gates, Cattleguards, or Fence Cuts: None

(8) All new roads have been flagged as required.

3. Location of Existing Wells: (See Map No. 2)

(1) Water Wells: None

(2) Abandoned Wells: See Map #2

(3) Temporarily Abandoned Wells: None

(4) Disposal Wells: None

(5) Drilling Wells: None at present

(6) Producing Wells: Several - See Map #2

(7) Shut-in Wells: Three

(8) Injection Wells: None

(9) Monitoring or Observation Wells: None

4. Location of Existing and/or Proposed Facilities:

A. Within 1-mile radius of location show the following existing facilities owned or controlled by lessee/operator:

(1): Tank Batteries: (Size) One 1000 bbl tank on the I.T. #2 well site (See Map #2).

(2) Production Facilities: Operator has three gas wells in Section 13 (See Map #2): I.T. #2; I.T. #8; and Jacobs #1.

(3) Oil gathering lines: None

(4) Gas gathering lines: Operator has 3½" gas line laid from Cisco Mesa rd. to the Jacobs #1 well (1600').

(5) Injection lines: None

(6) Disposal lines: None

(7) Are lines buried? No

B. If new facilities are contemplated, in the event of production, show: (These facilities depend on the outcome of the proposed well and are really unknown at this time.) Show a general proposed plan. (See Plat No. 2)

(1) Are any facilities planned off well pad? None at this time. If the well is a successful gas well, a gas gathering line (3½") will have to be laid and connected to the main gas line; but this will be covered by a separate proposed plan, accompanied with maps, surveys, etc., at a later date.

(2) Give dimensions of facilities: See Plat #2

(3) Construction methods and materials: Location will be levelled for production equipment. Tank batteries will be placed on a 3-in. gravel pad and surrounded with an 18" dike (15' from tanks). Separators and heater-treaters will be placed on gravel pads or cement bases. Pump jacks will be on cement platforms or on raised dirt and gravel mounds. All pipe lines on the pad will be buried.

(4) Protective measures for livestock and wildlife: All open pits will be fenced with woven wire (sheep) fence (40") and pump jacks or rotating machinery will have guards to prevent danger by moving parts.

C. Plan for rehabilitation of disturbed areas no longer needed after drilling operations are completed: Well site will be cleaned, levelled, and graded for production equipment; pits folded-in or

C. fenced with woven wire; before rig is moved if full of fluid. The other work will be done within 30 days after well is completed. While production ensues, previous areas of well pad not needed for production operations will be restored as in Item 10 below.

5. Location & Type of Water Supply: (See att. maps)

A. Type of Water Supply: Cisco Springs (natural flow) located in Section 9 of T 20S, R 23E. (See Map #3)

B. Method of Transporting Water: The water will be hauled from the spring to the well site by truck along the Cisco Mesa road. This will be approximately 5 miles from the spring to the well site.

C. Is Water Well Planned? No
If so, describe location, depth and formation:

6. Source of Construction Materials:

A. See attached map and describe: None will probably be required, since the well will be drilled during the good weather season. If the well is successful, the last 2 miles of road will be improved by ditching, and crowning to provide easy access during bad weather. Some places might also require some gravel.

B. Identify if Federal, Indian, or Fee Land: Unknown at this time.

C. Describe Material: (Where from and how used) The source, amount, type of material, and permit will have to be obtained at a later date, if required.

D. See item 1-C and 2 above.

7. Waste Disposal:

(1) Cuttings: The cuttings will be blown into the reserve pit, and the blewie line will be directed into the cut portion of the pit.

(2) Drilling Fluids: In mud tanks; excess put into reserve pit.

(3) Producing Fluids (oil or water) Oil in tanks; water in reserve pit.

(4) Human Waste: Toilet with pit (4' deep) with lime for odor and sanitation control. Will be covered with soil (3' deep) at end of operation.

(prior to commencement of drilling)

(5) Garbage & Other Waste: (Burn pit will be adequately fenced with chicken wire to prevent scattering of debris by wind) Into burn pit, (4'X6'X6' deep) and burned periodically. The burn pit will be approx. 125' from well head.

(6) Clean-up: (See item 10 below) All garbage and unburned debris will be buried by at least 3 ft. of cover after the drilling and completion operations are finished. The unused material and all equipment will be removed from the site and taken to supply yards or to the next drill site, as soon as the well is completed.

8. Airstrips and/or Camp Sites (Describe): None needed.

9. Well Site Layout: (See Plat No. 3)

(1) Describe cuts or fills: No cuts or fills other than for pits.

(2) Describe pits, living facilities, soil stockpiles: Reserve pit is long and narrow as shown, and will be placed in a natural depression on the north side. Excavated material will be piled at the north end of pit. Top soil, mostly gravel (12" deep), will be piled at the west end of the site. Two or three trailer houses will be provided for the supervisory personnel.

(3) Rig Orientation, Pipe rack, Access Road Entrance, etc.: (See Plat #3)

(4) Are Pits Lined? Unlined with 4-ft. banks.

10. Plans For Restoration:

A. If Well is completed: Site will be cleaned, debris removed, pits folded-in or fenced with woven wire if full of fluid, and site levelled for production equipment. All unused portions will be contoured, graded, scarred, and seeded with wheat grass, or acceptable seed mix authorized by BLM.

B. If Well is abandoned:

(1) Clean-up, levelling, folding pits-in, contouring: These items will be done as soon as possible. Clean-up will be accomplished at

B. (1) time rig is removed. The rest of the work should be done within 10 to 60 days after well is completed.

(2) Seeding location and access road: Site will be seeded with crested wheat grass, or with a seed mix suggested by BLM by hand broadcasting and then scarred with a dozer or spike-toothed drag. The access road, if no longer needed, will be erased, contoured, seeded, and scarred as above. Water bars will be placed where needed.

(3) Will pits be fenced or covered? If there is a large amount of fluid in the reserve pit, it will be fenced with woven wire before rig is released & remain fenced until the fluid drys up and the pit is reclaimed.

(4) Is there any oil in reserve pit? _____
If so, describe disposal: Should not be any great amount. If there is a large amount, it will be removed prior to covering pit.

(5) When will restoration work be done? As soon as possible. Within 60 days after equipment is removed if weather and availability of clean-up equipment permit and will be completed within 10 days thereafter.

11. Description of Land Surface:

(1) Topography & Surface Vegetation: Location is on fairly level ground near the edge of a point (topo.) and is on typical Mancos soil and gravel. Sparse sage brush, shad scale, grass and tumble weed are present.

(2) Other Surface Activities & Ownership: The land around the drill site is federal land with minerals owned by the public and surface owned by Patsantaras Land & Livestock Co. Jacobs Oil & Gas Co. has an oil & gas lease (#U-8659) on most of the NW¼ of Sec. 24. The area does have some grazing by sheep. There are no powerlines, powersites, irrigation ditches, (pg 7).

(3) Describe other dwellings, archaeological, historical, or cultural sites: There are no known buildings, archaeological, historical or cultural sites in the area. An abandoned railraod bed is located in Sec. 19 and 25 to the east and south of the proposed well site. Other oil and gas well drilling and production are present in the general area.

12. Operators Representative: (Address & Phone number)

W. Don Quigley, Suite 440, 57 W. So. Temple, Salt Lake City, Utah 84101
801-359-3575

13. Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the drill site and access route; that I am familiar with the conditions which presently exist; that statements made in this plan are, to the best of my knowledge, true and correct; and that work associated with the operations proposed herein will be performed by R. L. Jacobs Oil & Gas Company and its contractors in conformity with this plan and terms and conditions under which it is approved.

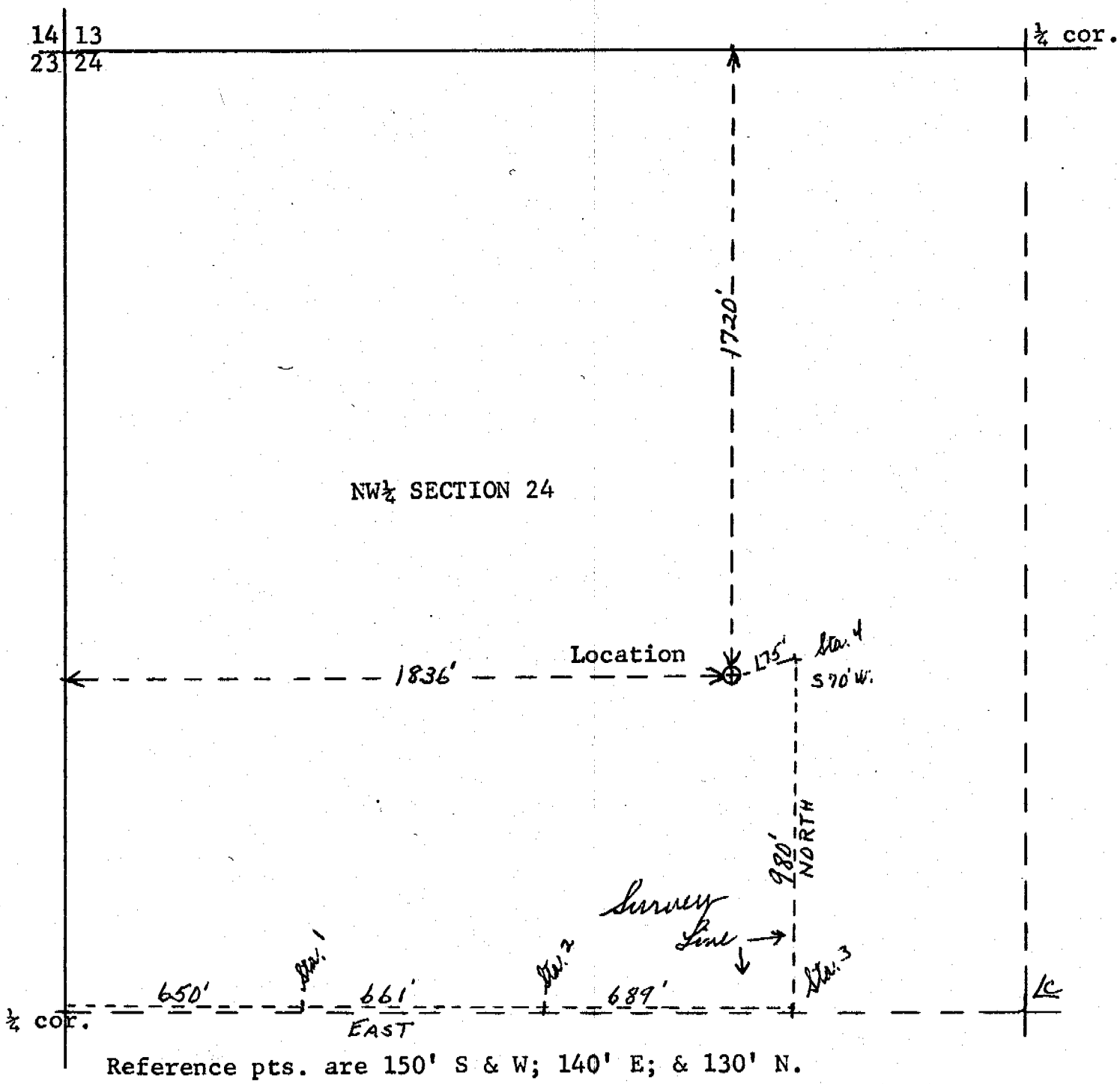
Date: April 13, 1979

Name: W. Don Gingley

Title: Geological Consultant

Continued:
11. (2): or cultivation in the area.

LOCATION PLAT FOR
R. L. JACOBS OIL & GAS COMPANY
FEDERAL #24-2 WELL
SE. NW. SEC. 24-20S-23E
GRAND COUNTY, UTAH
(1836' fr. W-line and 1720' fr. N-line)
Elev.: 4628' Grd.



Reference pts. are 150' S & W; 140' E; & 130' N.

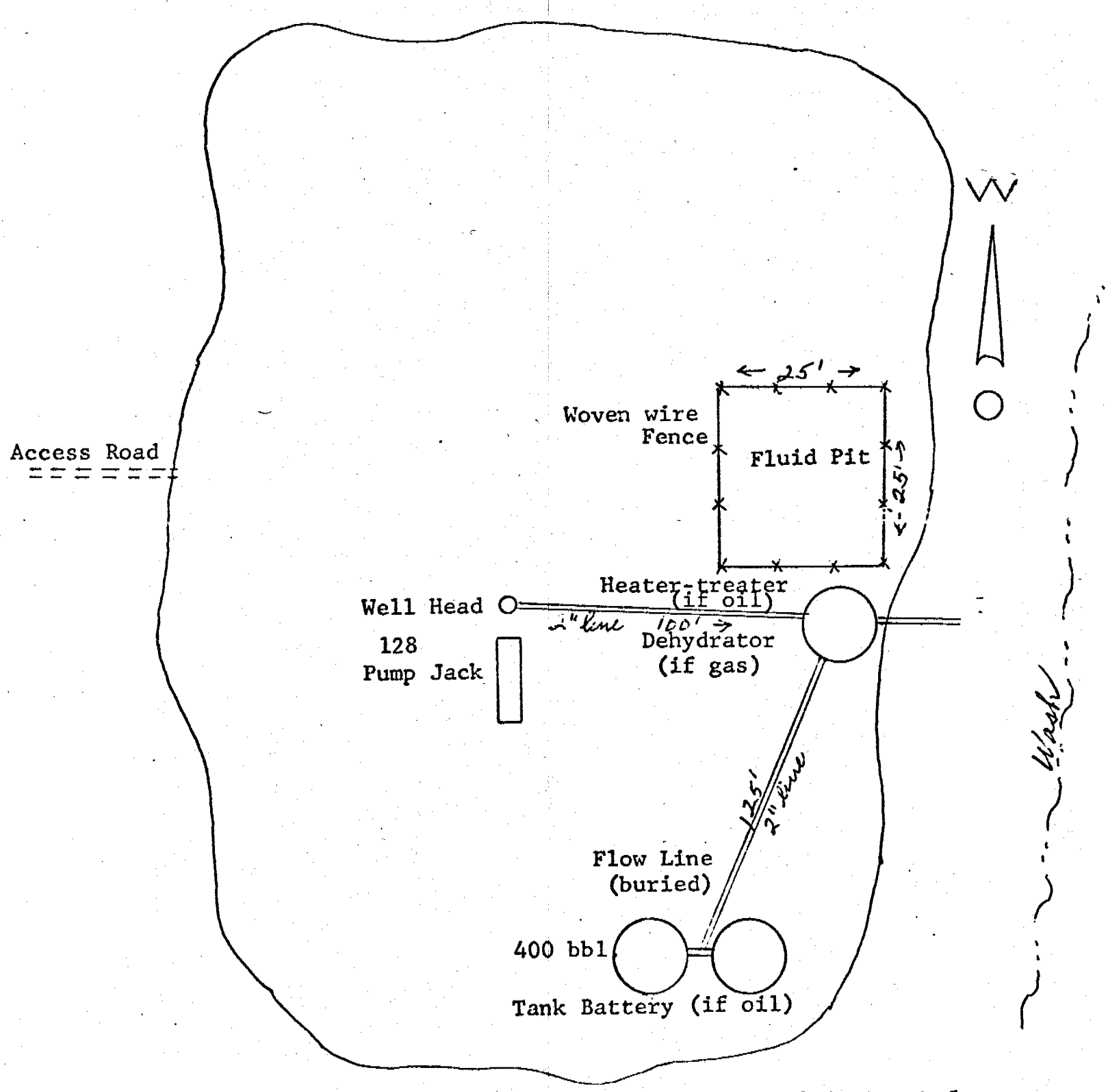
Scale: 1 in. = 400 ft.
Date: April 7, 1979

I, Sherman D. Gardner, do hereby certify that this plat was plotted from notes of a field survey made under my direct responsibility, supervision and checking on April 7, 1979.

Sherman D. Gardner
Registered Land Surveyor
State of Utah #1556

Plat No. 1

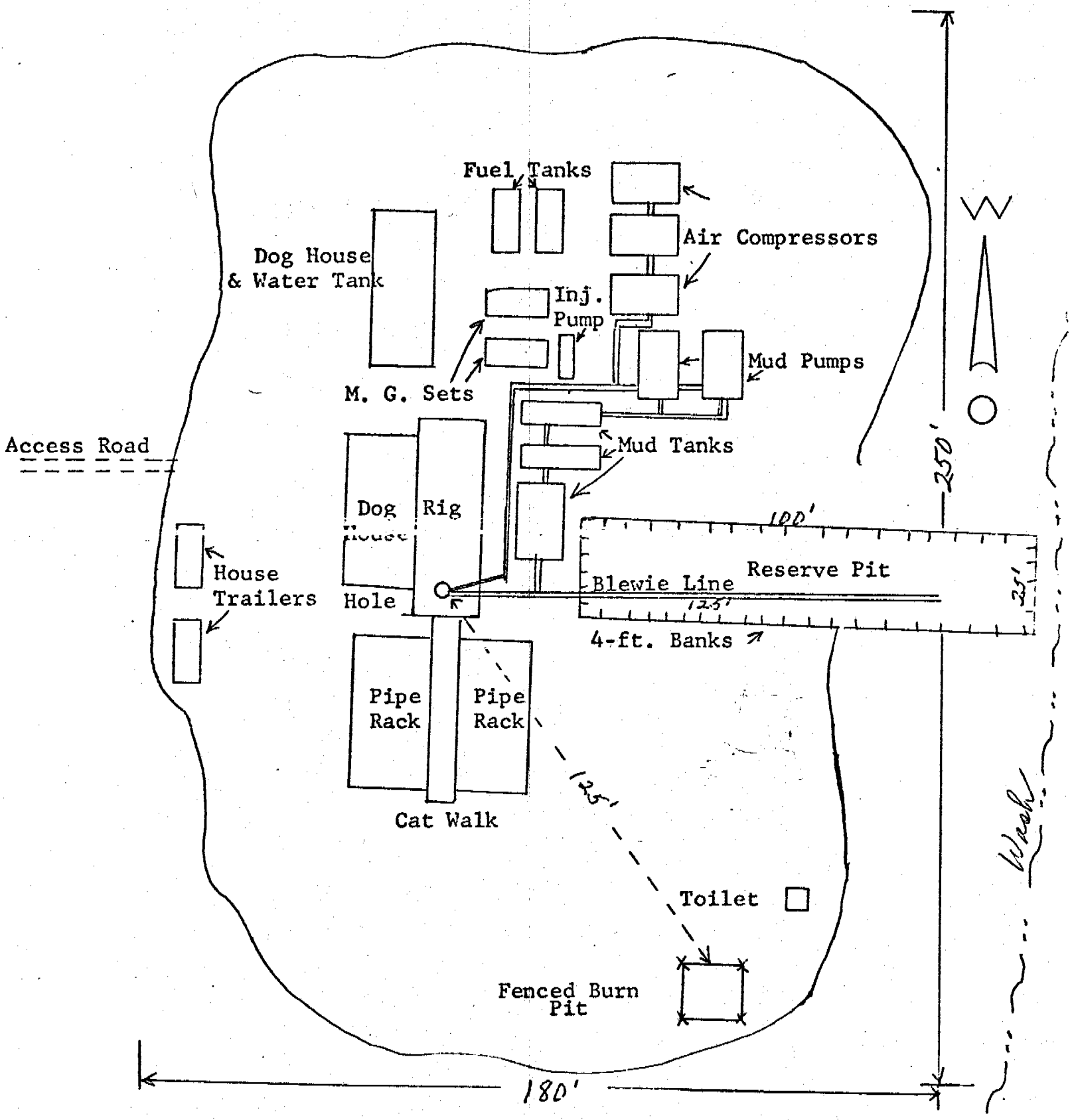
PLAN FOR PRODUCTION EQUIPMENT
R. L. JACOBS OIL & GAS CO.
FEDERAL #24-2 WELL
SE. NW. SEC. 24-20S-23E



Scale: 1 in.= 30 ft.

Plat No. 2

LOCATION PLAN FOR
R. L. JACOBS OIL & GAS CO.
FEDERAL #24-2 WELL
SE. NW. SEC. 24-20S-23E.



Scale: 1 in. = approx. 30 ft.

Plat No. 3

WELL CONTROL EQUIPMENT FOR
R. L. JACOBS OIL & GAS CO.
FEDERAL #24-2 WELL
SE. NW. SEC. 24-20S-23E.
GRAND COUNTY, UTAH

The following control equipment is planned for the above designated well: (See attached diagram)

1. Surface Casing:

   A. Hole size for surface casing is 9 3/4"
   B. Setting depth for surface casing is approx. 200 ft.
   C. Casing specs. are: 7 5/8" O.D., K-55, 24.00#, 8 rd. thread, R-3 new or used.
   D. Anticipated pressure at setting depth is approx. 20 lbs.
   E. Casing will be run using three centralizers and a guide shoe, and will be cemented with 75 sks of cement with returns to the surface.
   F. Top of the casing will be near ground level.

2. Casing Head:

   Flange size: 10", A.P.I. Pressure rating: 2000# W.P., Series 600; Cameron, OCT, or equivalent; new or used; equipped w/two 2" ports with nipples and 2", 2000# W.P. ball or plug valves. Casing head and valves set above ground level. (A flange only may be used on top of the casing, if the B.O.P. is equipped with 2" outlets below the blind rams.)

3. Intermediate Casing:

   None

4. Blowout Preventors:

   A. Double rams; hydraulic; one set of blind rams; one set of rams for 3½" or 4" drill pipe; 10" flange; 2000# or greater W.P.; Series 900; equipped with mechanical wheels and rod for back-up; set on top of casing head flange and securely bolted down, and pressure tested for leaks up to 2000# p.s.i. A hydraulically operated hy-drill may be used in place of the above B.O.P., if equipped with 2" outlets below the rams. B.O.P. will be tested for leaks at 2000# p.s.i. prior to drilling below surface casing.
   B. Rotating Head: Shaffer, Grants or equivalent; set on top of blowout preventor and bolted securely; complete with kelly drive, pressure lubricator; 3½" or 4" rubber for

2000# W.P.; need not have hydril assembly on bottom, if a separate hydril or B.O.P. is used.

C. Fill and Kill Lines: The fill and kill lines (2" tubing or heavy duty line pipe) are to be connected thru the 2" valves on the casing head and thru a manifold to permit ready switching from the fill to kill lines.

5. Auxillary Equipment:

A float valve is to be used in the bottom drill collar at all times. A safety valve that can be used in the drill pipe will be kept within easy reach on the rig floor at all times.

6. Anticipated Pressures:

The shut-in pressures of the Dakota, Cedar Mountain, and Morrison formations at depths of 2000' to 3000' in the area have been measured at about 600# to 800# maximum. No toxic gases have ever been encountered in the area and none are anticipated.

7. Drilling Fluids:

Air will be used to drill the subject well until water is encountered, then air-soap-water mist will be used to drill the well deeper. In case of excessive caving problems, it may be necessary to convert to mud.

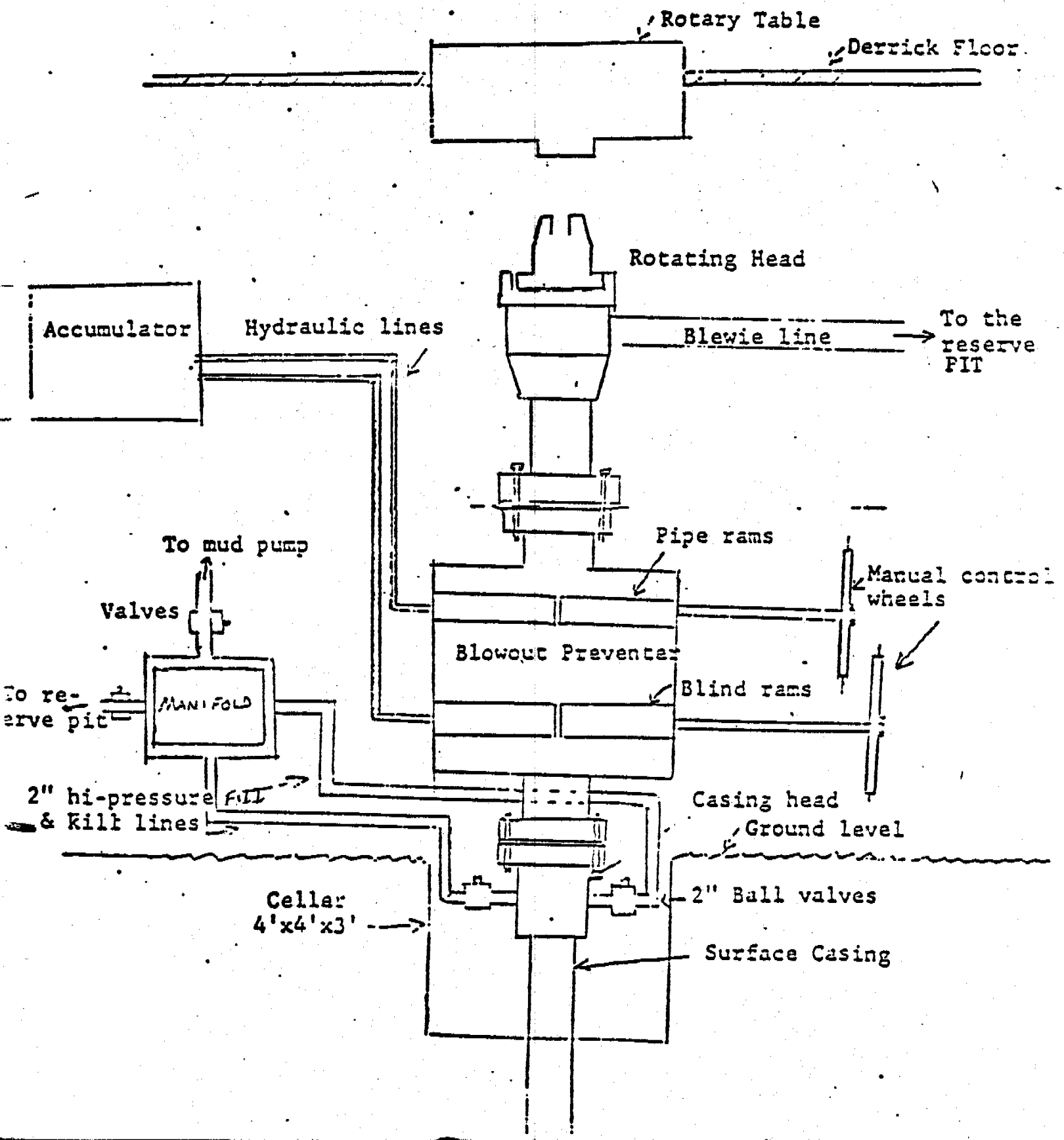
8. Production Casing:

A. Hole size for production casing will be 6½".
B. Approx. setting depth will be about 3500'.
C. Casing Specs. are: 4½" O.D.; K-55; 10.50#; 8-rd thread; R-3, new.
D. If good production is obtained, the casing will be run with a guide shoe at the bottom and about six centralizers and cemented conventionally with sufficient R.F.C. cement to cover 200 ft. above the top of the Dakota formation. The production zone will be perforated, 2 3/8" O.D. tubing will be run, and the well completed conventionally. In the event the production is small, it may be desirable to minimize the damage to the formation by keeping all mud and cement off the formation. In this case the procedure outlined below will be used.
E. Casing will be run with about six centralizers and a cement basket with DV tool set above the production zone.

There will be sufficient casing to extend thru the production zone below the basket with a blind guide shoe on the bottom. The casing will be cemented above the packer with about 85 sks of cement (sufficient to cement thru the Dakota formation). The cement will be allowed to cure at least 48 hrs. The plug can then be drilled out and the casing perforated below the DV tool. Two inch tubing will be run and secured in the tubing head prior to perforating.

SCHEMATIC DIAGRAM OF
CONTROL EQUIPMENT FOR THE

R. L. JACOBS OIL & GAS CO.
FEDERAL #24-2 WELL
SE. NW. SEC. 24-20S-23E.



RES. PHONE 801-295-1870

BUS. PHONE 801-359-3575

W. DON QUIGLEY

OIL AND MINERALS CONSULTANT
SUITE 440, 57 W. SO. TEMPLE - SALT LAKE CITY, UTAH 84101

April 16, 1979

Mr. Jack Feight
Oil & Gas Division
Department of Natural Resources
1588 West North Temple
Salt Lake City, Utah 84116

Dear Jack:

The enclosed applications for well permits show the locations of the proposed wells to be approximately 2200' apart. This is not quite the required 2640' between gas wells. However, the Jacobs #24-2 well is on a small topographic pennisula at the junction of two washes and I know BLM personnel would require the site to be moved if it was placed at a distance of 2640' from the #24-1 well. Therefore, a topographic acceptance to Rule 3 is requested.

Sincerely yours,

W. Don Quigley

W. Don Quigley

WDQ:sb

Enclosure

STATE OF UTAH
DIVISION OF OIL, GAS, AND MINING

** FILE NOTATIONS **

Date: April 20, 1979

Operator: R.L. Jacobs Oil & Gas Co.

Well No: Federal 24-2

Location: Sec. 24 T. 20S R. 23E County: Grand

File Prepared: [ ] Entered on N.I.D.: [✓]

Card Indexed: [✓] Completion Sheet: [✓]

API Number: 43-019-30509

CHECKED BY:

Administrative Assistant: _____

Remarks:

Petroleum Engineer: M.G. Minder 5-8-79

Remarks:

Director: _____

Remarks:

INCLUDE WITHIN APPROVAL LETTER:

#3

Bond Required: [ ] Survey Plat Required: [ ]

Order No. 102-5 11/2/64 Surface Casing Change to _____ [ ]

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

O.K. Rule C-3 [ ] O.K. In _____ Unit

Other:

[ ] Letter Written/Approved

State

RES. PHONE 801-295-1870

BUS. PHONE 801-359-3575

W. DON QUIGLEY

OIL AND MINERALS CONSULTANT
SUITE 440, 57 W. SO. TEMPLE - SALT LAKE CITY, UTAH 84101

April 30, 1979

RECEIVED
MAY 1 1979
DIVISION OF OIL, GAS, & MINING

Oil & Gas Division
U. S. Geological Survey
Federal Bldg. 1st South & State
Salt Lake City, Utah 84111

Oil & Gas Division
Dept. of Natural Resources
1588 West North Temple
Salt Lake City, Utah 84116

Re: Change of Location for
Jacobs #24-2 Well

Dear Sirs:

Due to objections raised by Utah State Oil & Gas Division to the original proposed location of Jacobs Oil & Gas Co. #24-2 well in Section 24 of T 20S, R 23E, Grand County, Utah, the proposed location has been moved to conform to Rule 22-2 for the area. ~~The well location is now in the~~ SW. NW., Section 24 (1000' fr. W-line and 2280' from N-line).

The attached maps and survey plat have been changed to show the new location. Please make the appropriate changes in the original APD accordingly. A new road from the location of the #24-1 well will be constructed along the bench area and across two shallow washes as shown. This new road is flagged and all data stated in the APD with regard to the original proposed new road will apply here also.

Sincerely yours,

W. Don Quigley

W. Don Quigley

WDQ:sb
Enclosure

cc: Jacobs Oil & Gas Co.
w/encl.

SCOTT M. MATHESON
Governor

GORDON E. HARMSTON
Executive Director,
NATURAL RESOURCES

CLEON B. FEIGHT
Director

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING
1588 West North Temple
Salt Lake City, Utah 84116
(801) 533-5771

OIL, GAS, AND MINING BOARD

CHARLES R. HENDERSON
Chairman

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

May 11, 1979

R L JACOBS OIL & GAS CO
2467 COMMERCE ST
GRAND JUNCTION CO 81501

Re: Well No. Federal 24-2, Sec. 24, T. 20 S, R. 23 E, Grand County, UT

Gentlemen:

Insofar as this office is concerned, approval to drill the above referred to well is hereby granted in accordance with teh Order issued in Cause No. 102-5 dated Novermber 2, 1964.

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: 533-5771

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) 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 43-019-30509.

Yours very truly,

DIVISION OF OIL, GAS, AND MINING

Cleon B. Feight

Cleon B. Feight, Director

/lw

cc: U. S. Geological Survey

Enclosure

Form OGCC-3

5

STATE OF UTAH

OIL & GAS CONSERVATION COMMISSION

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

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

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

2. NAME OF OPERATOR: R. L. JACOBS OIL & GAS CO.

3. ADDRESS OF OPERATOR: 2467 COMMERCE BLVD. GRAND JCT. COLO. 81501

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

At surface: Located ~~1836'~~ 1000' from west-line & ~~1720'~~ 2280' from NORTH line of section #24

At top prod. interval reported below

At total depth

5. LEASE DESIGNATION AND SERIAL NO.: U-8659

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: NA

7. UNIT AGREEMENT NAME: NA

8. FARM OR LEASE NAME: FEDERAL

9. WELL NO.: JACOBS #24-2

10. FIELD AND POOL, OR WILDCAT: CISCO SPRINGS

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: SW NW SEC.24-20s-23e

14. PERMIT NO. | DATE ISSUED

12. COUNTY OR PARISH: GRAND

13. STATE: UTAH

15. DATE SPUDDED: 5/31/79

16. DATE T.D. REACHED: 9/16/79

17. DATE COMPL. (Ready to prod.): 6/10/79 &9/29/79

18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*: 4628' GR4638' KB

19. ELEV. CASINGHEAD: 4628

20. TOTAL DEPTH, MD & TVD: 1423

21. PLUG, BACK T.D., MD & TVD

22. IF MULTIPLE COMPL., HOW MANY*

23. INTERVALS DRILLED BY: ROTARY TOOLS: 0-1423 | CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 1083'-1103' DAKOTA

25. WAS DIRECTIONAL SURVEY MADE: YES 1°

26. TYPE ELECTRIC AND OTHER LOGS RUN: DUAL INDUCTION-LATERLOG, COMPENSATED NEUTRON-FORMATION DENSITY

27. WAS WELL CORED: NO

RECEIVED OCT 22 1979 DIVISION OF OIL, GAS, & MINING

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8 5/8	20.0	200'	12 1/4	100 SACKS	0
5 1/2	11.5	1423'	7 7/8	150 SACKS	0

29. LINER RECORD

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

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 3/8	1056'	NONE

31. PERFORATION RECORD (Interval, size and number): 1083'-1103' 4 SPF

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33.* PRODUCTION

DATE FIRST PRODUCTION: NA

PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump): FLOWING

WELL STATUS (Producing or shut-in): SHUT-IN

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

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
260#	390#	→		3500 EST.		

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.): TO BE SOLD WHEN READY

TEST WITNESSED BY: DATE TO BE SET

35. LIST OF ATTACHMENTS: DUAL INDUCTION AND NEUTRON-FORMATION LOGS

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

SIGNED Leonard Collins TITLE CONTROLLER DATE 10-18-79

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

INSTRUCTIONS

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

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

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

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

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

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

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

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
MANCUS	0	1090	GRAY SHALE
DAKOTA	1090	1270	SAND & SHALE INTERBEDDED
MORRISON	1270	1420	GREEN SHALE
BRUSHY BASIN	1420	1423	T.D. CONGLAMERATE SAN STONE

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
DAKOTA	1090	HOLE DEVIATION
MORRISON	1270	1° 0-1423
BRUSHY BASIN	1420	

STATE OF UTAH

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

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

5. LEASE DESIGNATION AND SERIAL NO.: U-8659

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: NA

7. UNIT AGREEMENT NAME: NA

8. FARM OR LEASE NAME: NA

9. WELL NO.: JACOBS 24-2

10. FIELD AND POOL, OR WILDCAT: GREATER CISCO

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: SEC. 24, T-20S R-23E

12. COUNTY OR PARISH: GRAND

13. STATE: UT.

1. OIL WELL ☐ GAS WELL ☒ OTHER

2. NAME OF OPERATOR: R.L. JACOBS OIL & GAS CO.

3. ADDRESS OF OPERATOR: 2467 COMMERCE BLVD. GRAND JCT. CO. 81505

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 1836' FROM WEST LINE, 1720' FROM NORTH LINE

14. PERMIT NO.:

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 4628' GR

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

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☒	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other)			
(Other)							

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

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

WELL TO BE PLUGGED AND ABANDON (AS PER PHONE CALL WITH GREGG)

PLUG PLAN:

10 SACKS CEMENT AT SURFACE

1000' TO 1125'

ACCEPTED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
DATE: 5/30/85
BY: John R. Baza

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

SIGNED L. Collins TITLE ACCOUNTANT DATE 5-20-85

(This space for Federal or State office use)

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

*See Instructions on Reverse Side

STATE OF UTAH

2

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

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

5. LEASE DESIGNATION AND SERIAL NO.: U-8659

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: NA

1. OIL WELL ☐ GAS WELL ☒ OTHER

7. UNIT AGREEMENT NAME: NA

2. NAME OF OPERATOR: R.L. JACOBS OIL & GAS CO

8. FARM OR LEASE NAME: NA

3. ADDRESS OF OPERATOR: 2467 COMMERCE BLVD. GRAND JCT. CO. 81505

9. WELL NO.: JACOBS 24-2

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface
~~1836~~ 1800 FROM WEST LINE
~~1720~~ 1720' FROM NORTH LINE

10. FIELD AND POOL, OR WILDCAT: GREATER CISCO

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: SEC. 24, T-20S R-23E

14. PERMIT NO.: ~~3280~~

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 4628' GR

12. COUNTY OR PARISH: GRAND

13. STATE: UT

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐
REPAIR WELL	☐	CHANGE PLANS	☐
(Other)			☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☒
(Other)			

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

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

WELL PLUGGED:

10 SACKS CEMENT AT SURFACE
1000' TO 1125'

ACCEPTED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
DATE: 5/30/85
BY: John R. Baza

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

SIGNED: L. Collins TITLE: ACCOUNTANT DATE: 5-21-85

(This space for Federal or State office use)

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

*See Instructions on Reverse Side