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 [ ] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: N. P. Energy Corporation

3. ADDRESS OF OPERATOR: 1399 South 7th East, Salt Lake City, Utah 84105

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: NW. NE. Sec. 30, T 20S., R 22E., S.L.M. 3092
At proposed prod. zone (~~700'~~ 632 fr. N-line and ~~2115'~~ 1727 fr. E-line)

5. LEASE DESIGNATION AND SERIAL NO.: U-12702

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME: NA

8. FARM OR LEASE NAME: Federal

9. WELL NO.: Fed. #30-2

10. FIELD AND POOL, OR WILDCAT: Cisco Dome

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: NW.NE. Sec. 30-20S-22E. S.L.M.

12. COUNTY OR PARISH: Grand

13. STATE: Utah

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: Approximately 13 miles NW. of Cisco, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 700'

16. NO. OF ACRES IN LEASE: 640 acres

17. NO. OF ACRES ASSIGNED TO THIS WELL: 160 acres

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: ½ mile

19. PROPOSED DEPTH: 2800'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 4987' grd; 4997' K.B.

22. APPROX. DATE WORK WILL START*: Feb. 15, 1979

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#	200'	100 sks
6½"	4½"	10.50#	thru pay zone	and cemented to 200' above Kd.

It is planned to drill a well at the above location to test the gas and/or oil production possibilities of the sands in the Dakota, Cedar Mt., Morrison, and Entrada formations. The well will be drilled to approximately 50 to 100 ft. below the top of the Entrada formation, if conditions permit. The well will be drilled with rotary tools, using air for circulation. The surface casing (7 5/8") will be set at about 200' K.B. and cemented with returns to the surface. A blowout preventer and rotating head will be installed on top of the surface casing. Fill and kill lines will be connected to the well head below the blind rams on the blowout preventer. Any gas encountered will be flared at the end of the blewie line, and roughly checked for volume thru a 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 of 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 [signature] TITLE President DATE January 12, 1979

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY [signature] TITLE ACTING DISTRICT ENGINEER DATE JUL 19 1979

CONDITIONS OF APPROVAL, IF ANY:

CONDITIONS OF APPROVAL ATTACHED TO OPERATOR'S COPY

NOTICE OF APPROVAL

*See Instructions On Reverse Side

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

State O&G

PROGNOSIS FOR
N. P. ENERGY CORP.
FEDERAL #30-2 WELL

Location: NW. NE. Sec. 30, T 20S, R 22E, S.L.M., Grand County, Utah (700' fr. N-line and 2115' fr. E-line)

Elevation: 4987' grd.; 4997' K.B.

Surface Casing: 200 ft. of 7 5/8", 24.00#, K-55, R-3 casing set and cemented w/100 sks of cement w/3% CaCl, with returns to the surface. The surface hole (9 3/4") will be drilled to 200 ft. K.B. and will be less than 1½° deviation.

Expected Formation Tops:

Formation	Depth to Top	Thickness	Datum
Mancos	Surface	2000'	4997' K.B.
Dakota	2000'	50'	2997'
Cedar Mountain	2050'	80'	2947'
Morrison (Brushy B.)	2130'	250'	2867'
(Salt Wash)	2380'	290'	2617'
Curtis-Summerville	2670'	50'	2327'
Entrada	2720'	—	2277'
Total Depth	2800'		

1. It is planned to drill a 9 3/4" surface hole for the surface casing down to a depth of about 200 ft. and set 7 5/8" casing with approx. 100 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 100 ft. long, will then be attached to the rotating head and extended into the reserve pit.

2. A 6½" hole will then be drilled below the surface casing, using air for circulation. A flare will be maintained at the end of the blewie line at all times while drilling below 1200'. This will insure that no gas will be missed. The air drilling will also minimize the damage to the hydrocarbon reservoir.

3. Samples of the cuttings will begin at 1600'. 30-ft. samples will be taken from 1600' to 1950', and then 10-ft. samples will be taken from 1950' 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 - low water loss 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.

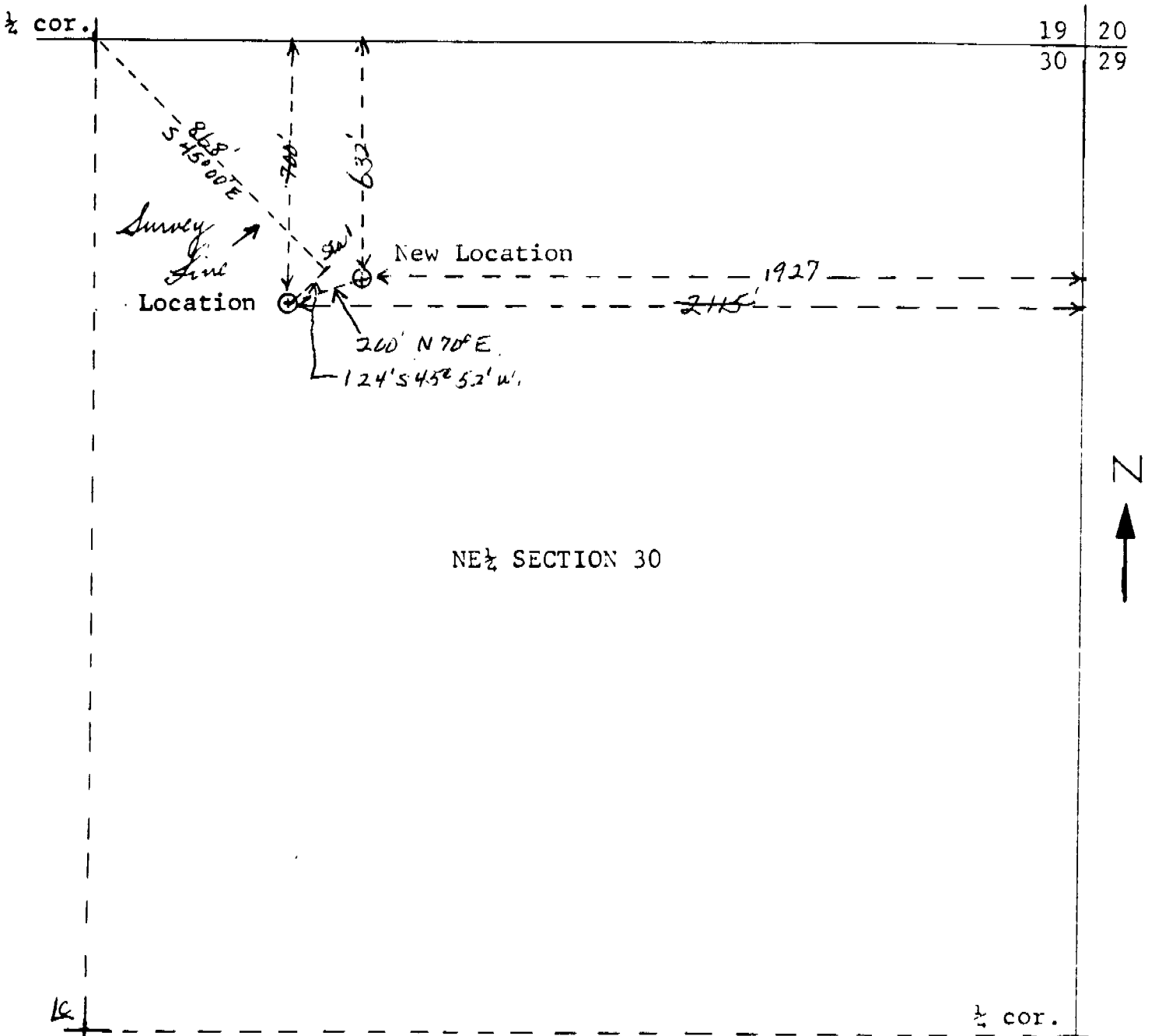
7. It is anticipated that the drilling of the well will require less than one week.

8. See also the attached list of Well Control Equipment.

W. Don Quigley

W. Don Quigley
Consulting Geologist
Salt Lake City, Utah

LOCATION PLAT FOR
N. P. ENERGY CORPORATION
FEDERAL #30-2 WELL
NW. NE. SEC. 30-20S-22E
(632' fr. N-line & 1927' fr. E-line)
GRAND COUNTY, UTAH
Elev: 4987' grd.



Ref. pts. are 150' N; 100' S; 150' N70°E & 150' S70°W

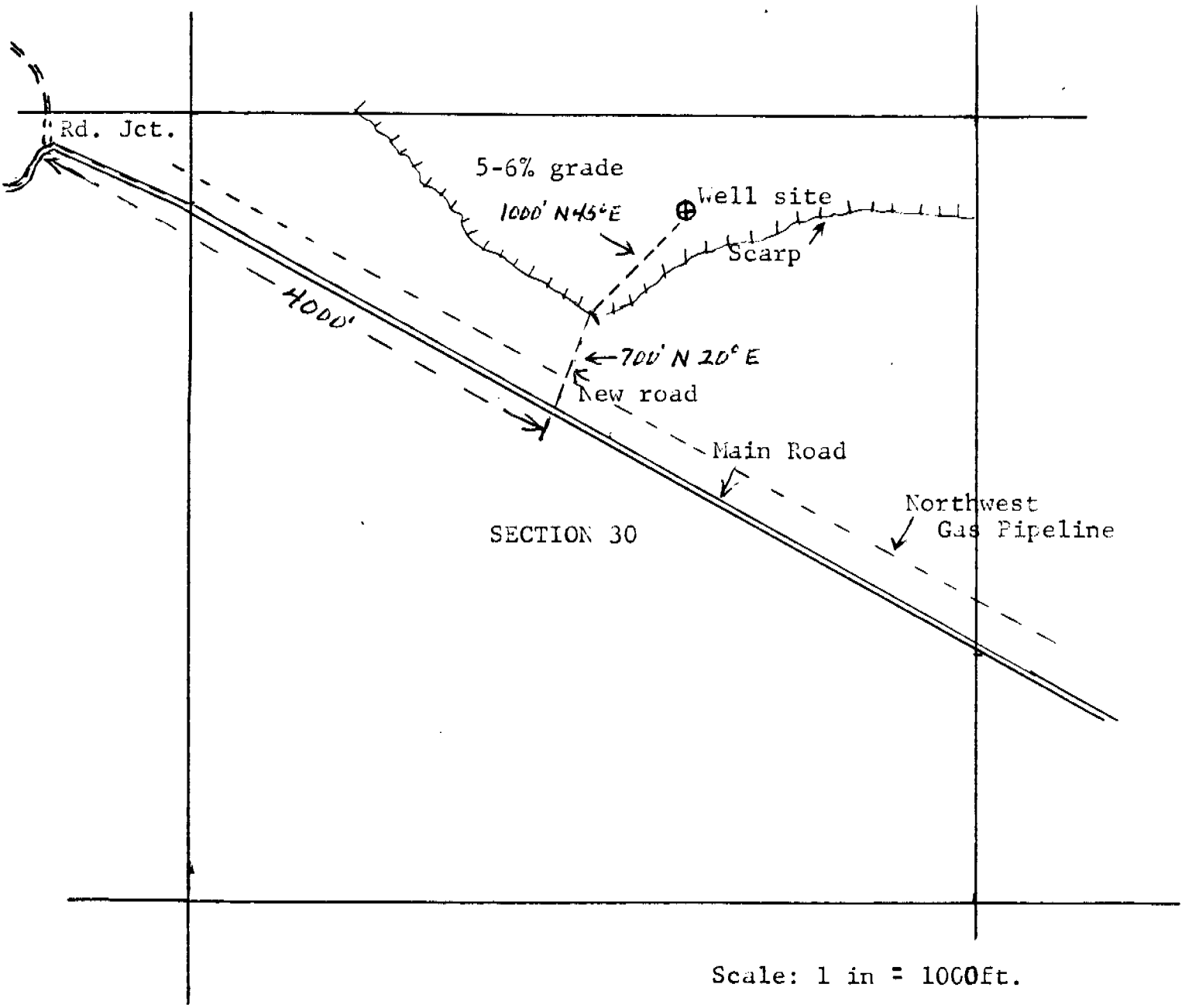
Scale: 1 in. = 400 ft.
Date: December 18, 1978

I, Sherman D. Gardner, do hereby certify that this plat was plotted from notes of a field survey made under my direct supervision, responsibility and checking on December 16, 1978.

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

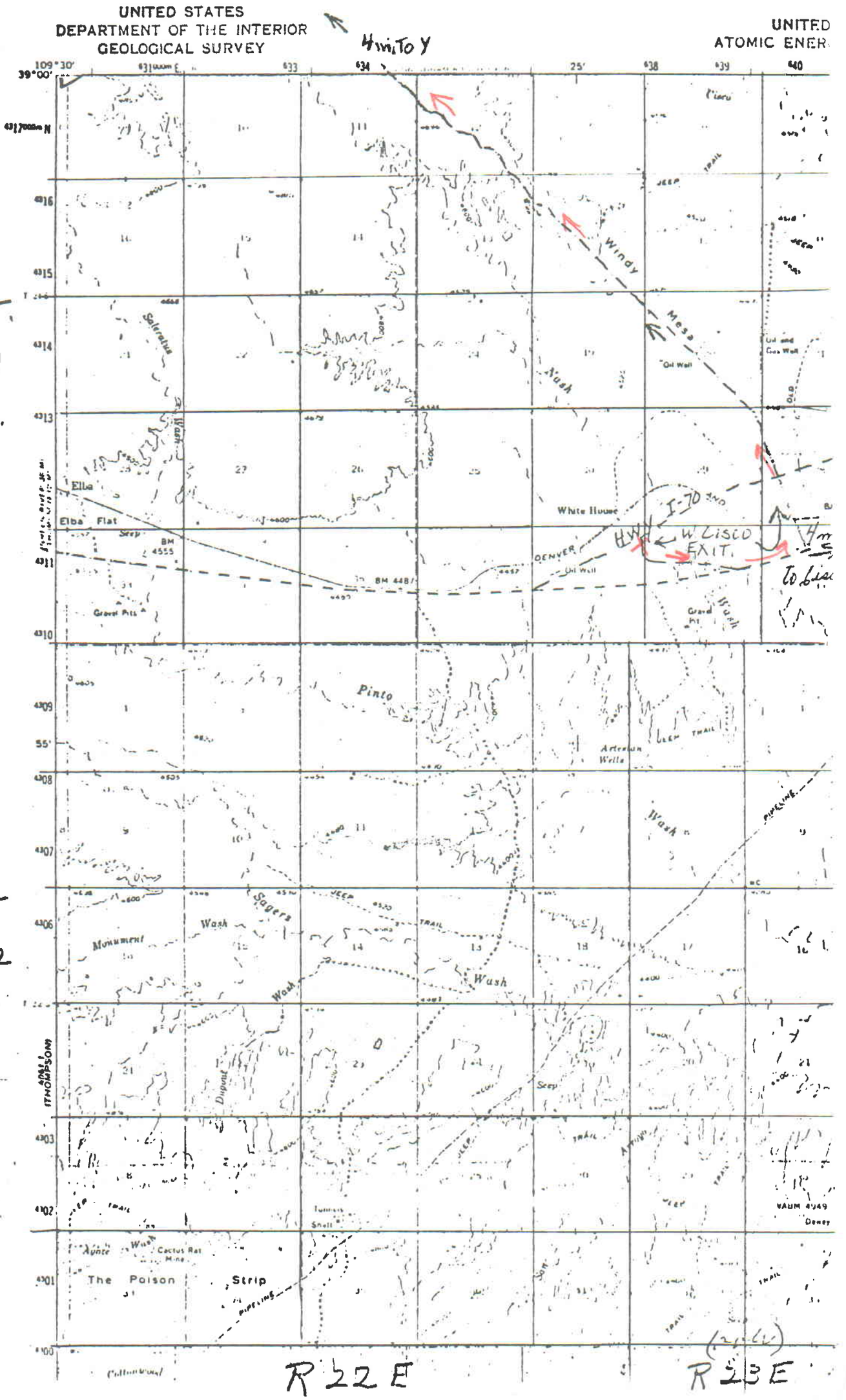
PLAT NO. 1

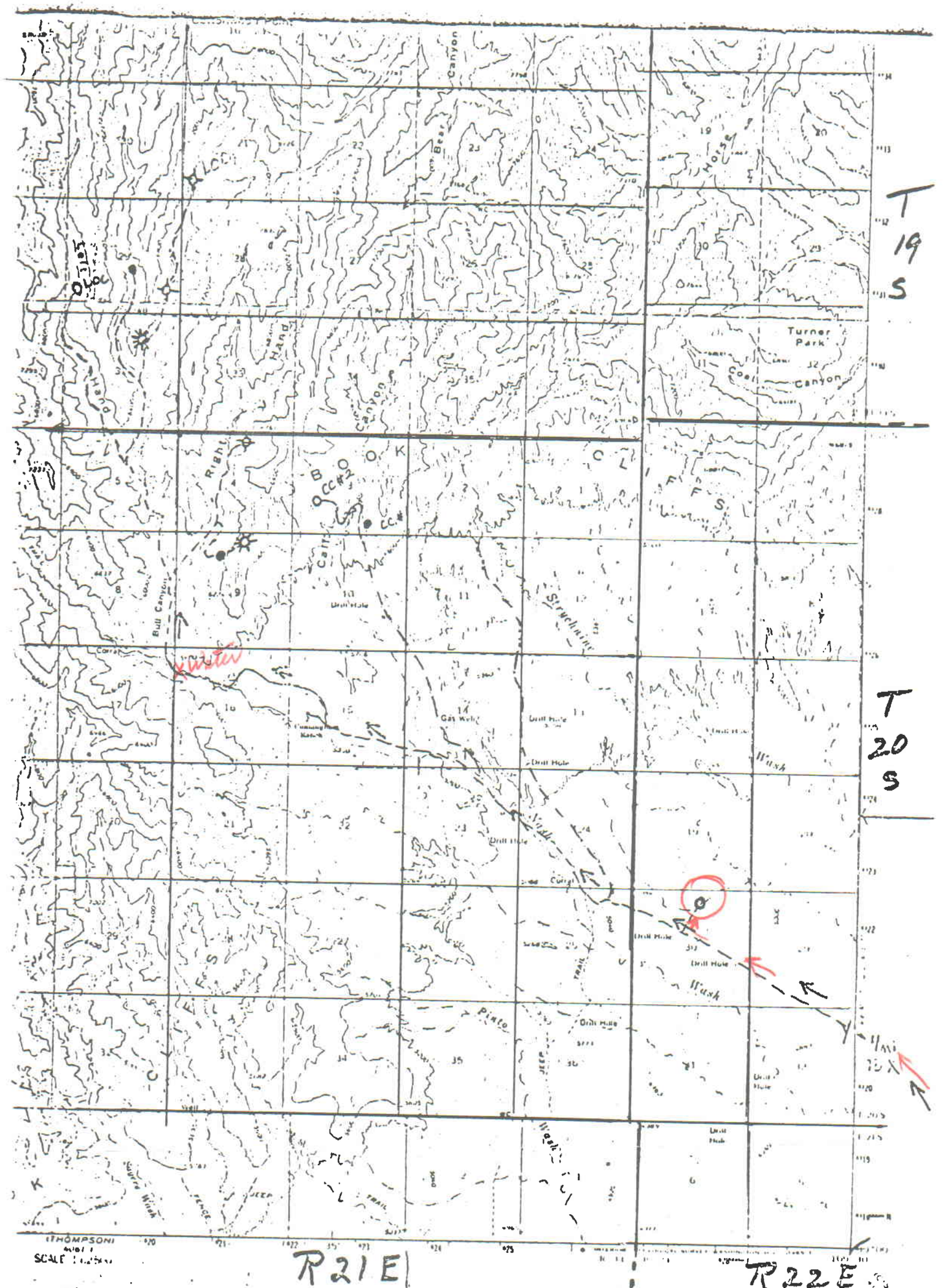
SKETCH OF NEW ACCESS ROAD
TO
N.P. ENERGY CORP.
FED.#30-2 WELL
NW.NE.SEC.30-20S-22E,SLM

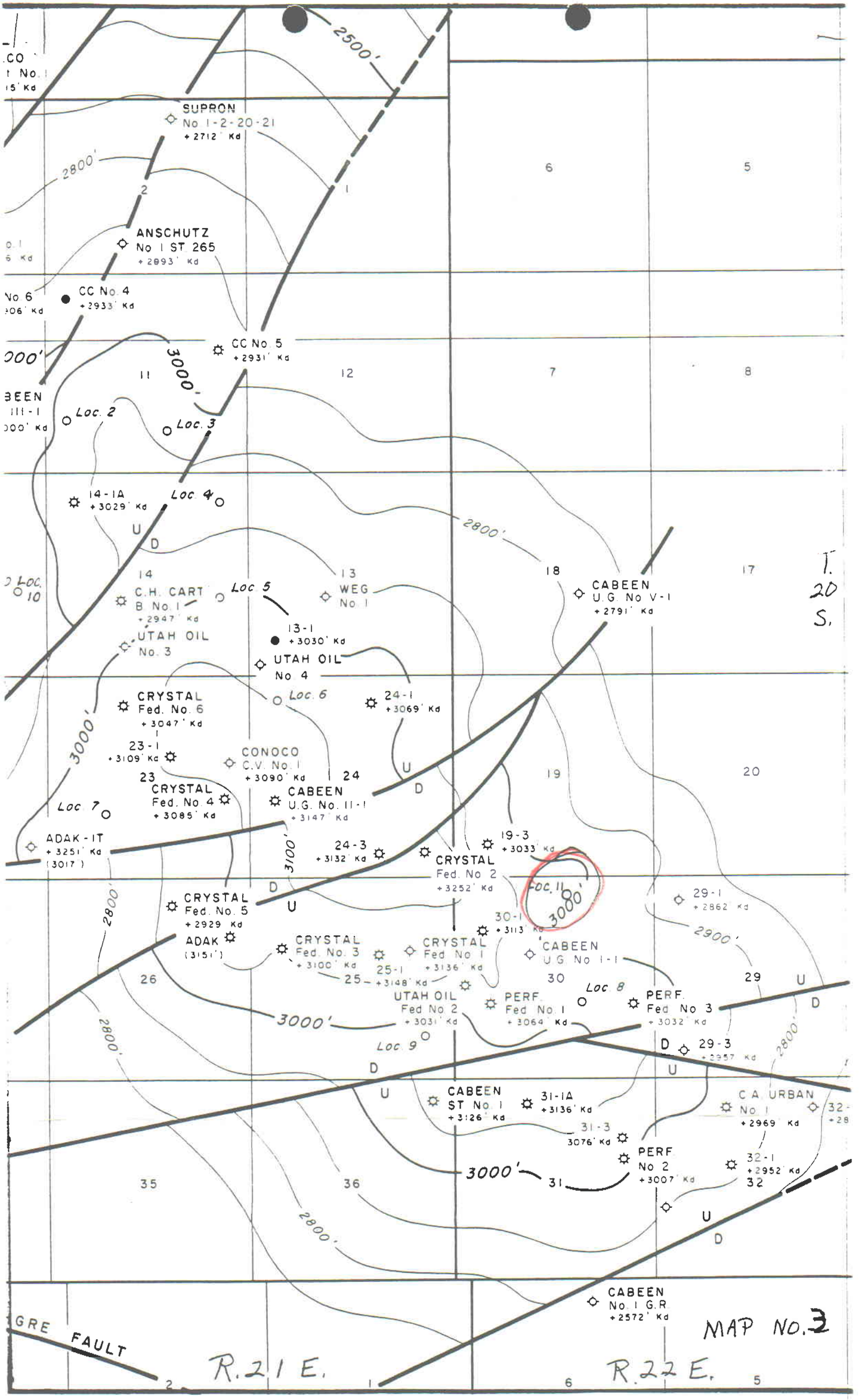


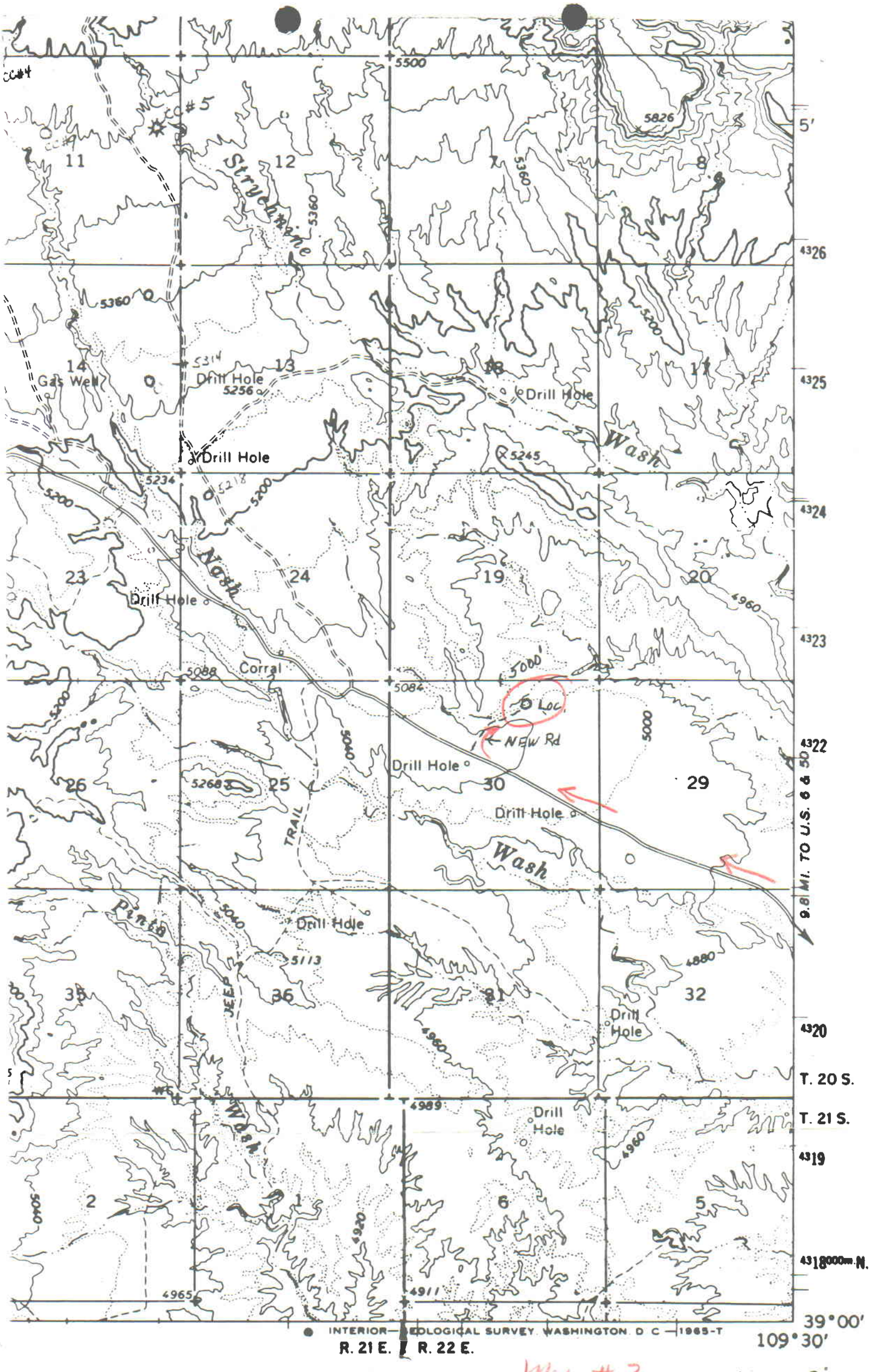
Scale: 1 in = 1000ft.

MAP NO. 1


UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
UNITED
ATOMIC ENER
Hwy To Y
T. 21 S.
T 22 S
R 22 E
R 23 E
Windy
Mesa
Wash
Saleratus
Wash
Elba
Elba Flat
Seep
BM 4555
Gravel Pits
White House
I-70 AND
HWY
W LISCO
EXIT
To Lisc
DENVER
Oil Well
BM 4481
Pinto
Arterburn Wells
Wash
PIPELINE
Sagers
Wash
Monument
Wash
Wash
Dispute
Seep
Tunnel Shaft
Apache
Wash
Cactus Rat Mine
The Poison Strip
PIPELINE
Oil and Gas Well
Old
Oil Well
Gravel Pit
Wash
JEEP TRAIL
VABM 4049
Dewey


T 19 S
T 20 S
R 21 E
R 22 E
Turner Park
Coal Canyon
Bear Canyon
Horse
Hand
Right
Bull Canyon
Strychnine
Drill Hole
Gas Well
Pinto
Water
Wash
Trail
Jeep
Fence
Upper Wash
Light Duty
Unimproved Dirt
State Route
ROAD CLASSIFICATION
CONTOUR INTERVAL 80 FEET
SCALE
UTAH
MAP NO. 1
SEGO CANYON, UTAH


SUPRON
No. 1-2-20-21
+2712' Kd
ANSCHUTZ
No. 1 ST. 265
+2893' Kd
CC No. 4
+2933' Kd
CC No. 5
+2931' Kd
Loc. 2
Loc. 3
Loc. 4
14-1A
+3029' Kd
C.H. CARTER No. 1
+2947' Kd
Loc. 5
WEG No. 1
13-1
+3030' Kd
UTAH OIL No. 3
UTAH OIL No. 4
Loc. 6
CRYSTAL Fed. No. 6
+3047' Kd
24-1
+3069' Kd
23-1
+3109' Kd
CONOCO C.V. No. 1
+3090' Kd
CRYSTAL Fed. No. 4
+3085' Kd
CABEEN U.G. No. 11-1
+3147' Kd
Loc. 7
ADAK-IT
+3251' Kd
(3017')
24-3
+3132' Kd
19-3
+3033' Kd
CRYSTAL Fed. No. 2
+3252' Kd
Loc. 11
CABEEN U.G. No V-1
+2791' Kd
29-1
+2862' Kd
CRYSTAL Fed. No. 5
+2929' Kd
ADAK
(3151')
CRYSTAL Fed. No. 3
+3100' Kd
CRYSTAL Fed. No. 1
+3136' Kd
30-1
+3113' Kd
CABEEN U.G. No. 1-1
25-1
+3148' Kd
UTAH OIL Fed. No. 2
+3031' Kd
PERF. Fed. No. 1
+3064' Kd
Loc. 8
PERF. Fed. No. 3
+3032' Kd
Loc. 9
29-3
+2957' Kd
CABEEN ST No. 1
+3126' Kd
31-1A
+3136' Kd
31-3
3076' Kd
C.A. URBAN No. 1
+2969' Kd
PERF. No. 2
+3007' Kd
32-1
+2952' Kd
CABEEN No. 1 G.R.
+2572' Kd
GRE FAULT
T. 20 S.
R. 21 E.
R. 22 E.
MAP No. 3


Strychnine
Wash
Gas Well
Drill Hole
Corral
Loc.
New Rd
TRAIL
JEEP
Pinto
9.8 MI. TO U.S. 6 & 50
T. 20 S.
T. 21 S.
R. 21 E.
R. 22 E.
INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D.C.—1965-T
39°00'
109°30'

Map #2

SW. Qua

WELL CONTROL EQUIPMENT FOR
N. P. ENERGY CORP.
FEDERAL #30-2 WELL
NW. NE. SEC. 30-20S-22E
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 100 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. 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 abnormal pressures 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.

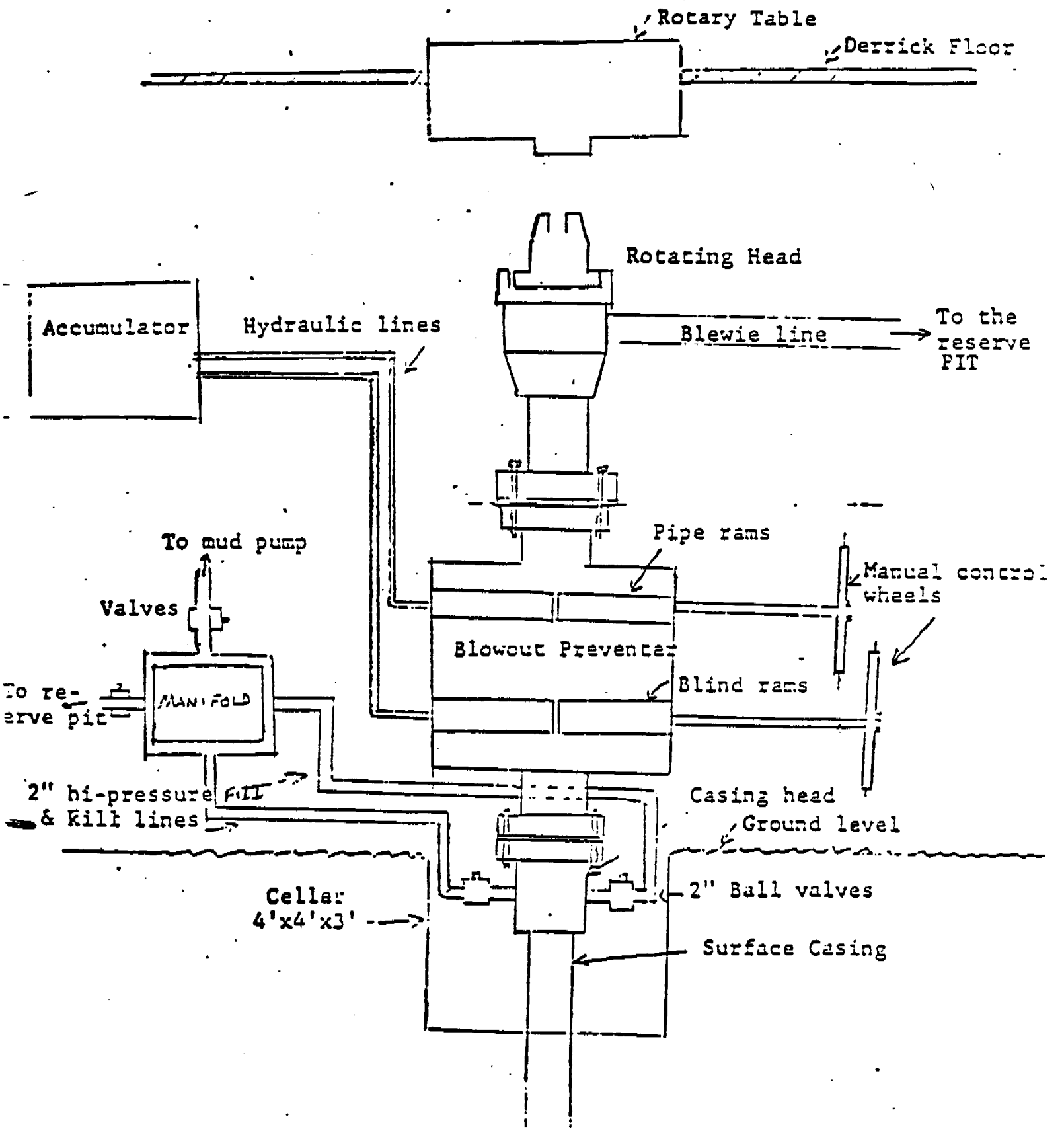
8. Production Casing:

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.

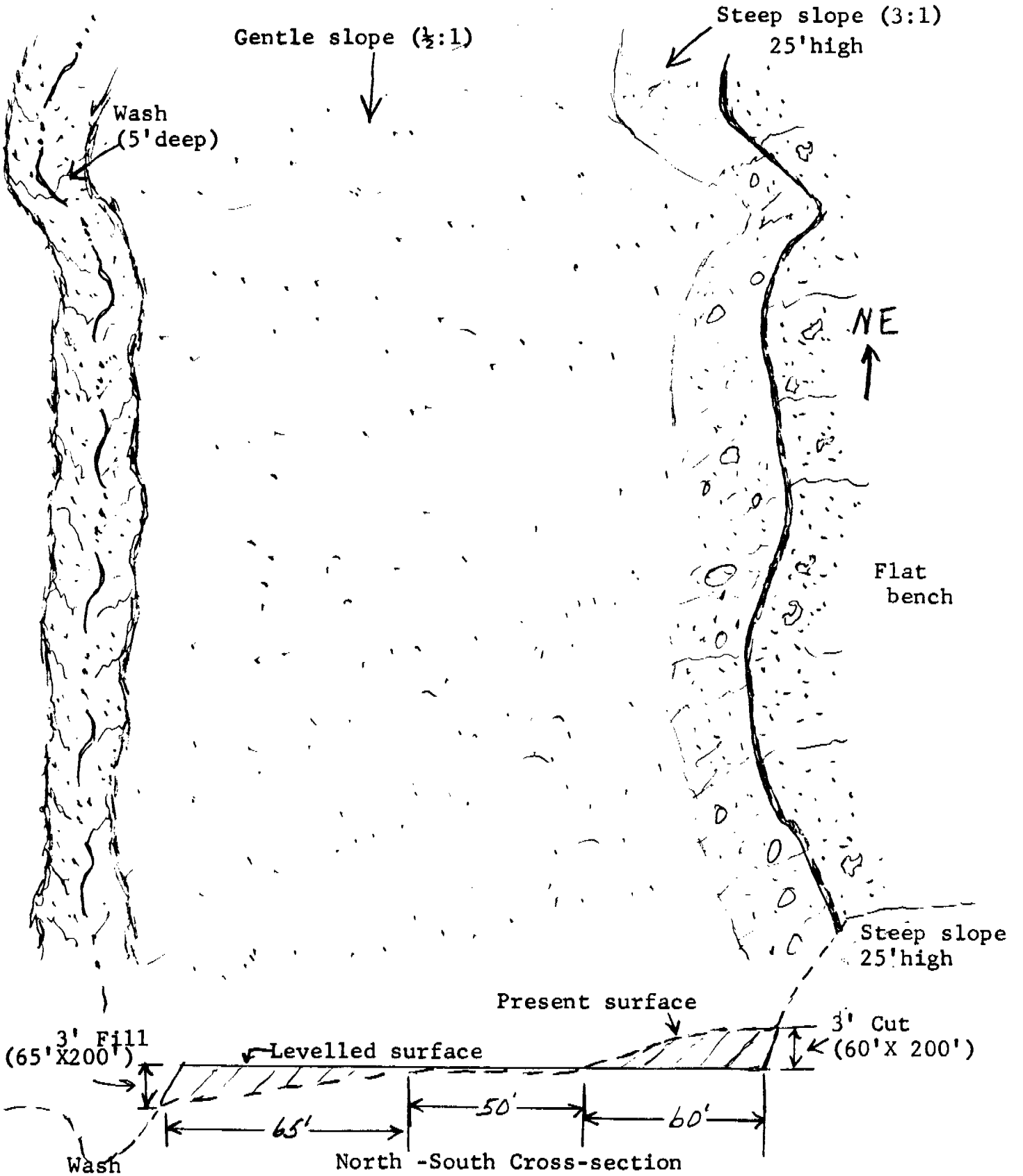
There will be sufficient casing to extend thru the production zone below the basket with a blind guide shoe on the bottom. The casing will be cemented above the packer with about 85 sks of cement (sufficient to cement thru the Dakota formation). The cement will be allowed to cure at least 48 hrs. The 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

N.P. ENERGY CORP.
FEDERAL #30-2 WELL
NW. NE. SEC. 30-20S-22E



SCHEMATIC SKETCH OF
CUT AND FILL
FED. #30-2 WELL SITE



PLAT NO. 4

Form: DQ-1

NTL-6 PLAN REPORT
For

Well Name: Federal #30-2

Location: NW. NE. Sec. 30-20S-22E, S.L.M., Grand County, Utah

1. Existing Roads: (See attached Maps)

A. Well Location: (See Plat #1)

Reference Stakes: 150' N-S-E-W.

Perimeter Stakes: 150' E and W; 120' N and 100' S.

B. Route and Distance to Well Site From Reference Point: (See att. Maps)
Approximately 12½ miles from W-Cisco Exit on I-70 along Windy Mesa road.

C. Access Roads (Identify secondary roads to be used): (See att. Maps)
The Windy Mesa road is used from I-70 for about 12 miles and then a new road to be built for the last ½ mile.

D. Roads Within 3 mile Radius: (See attached Maps)

Surface type and conditions: The Windy Mesa road is well used and is partly gravelled and the rest is natural surface. It is graded and in good shape at present.

E. Roads Within 1 mile Radius: (See attached Maps) See 1-D above: The last ½ mile to the well site will be new road.

F. Plans for Road Improvement & Maintenance: The new road will be bladed across sage brush for ½ mile. The roads may be graded in bad weather.

2. Planned Access Roads: (See attached Maps) New access road - ½ mile

(1) Width: 14 ft. wide path bladed across sage brush.

(2) Maximum Grades: 8% maximum

(3) Turnouts: None

(4) Drainage Design: None will be required

(5) Location and Size of Culverts, Cuts, and Fills: None required, except shallow washes will be filled in. No culverts will be required. No deep cuts are required.

(6) Surfacing Material: Natural material

(7) Gates, Cattleguards, or Fence Cuts: No additional gates, cattle-guards, etc. are required.

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

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

(1) Water Wells: None

(2) Abandoned Wells: See Map

(3) Temporarily Abandoned Wells: None

(4) Disposal Wells: None

(5) Drilling Wells: None at present

(6) Producing Wells: Approximately 7 wells

(7) Shut-in Wells: Several - waiting for gas line

(8) Injection Wells: None

(9) Monitoring or Observation Wells: None

4. Location of Existing and/or Proposed Facilities: (These facilities depend on the outcome of the proposed well and are really unknown at this time. A proposed plan is shown on Plat No. 2.)

A. (1) Tank Batteries: (Size) Two 400 bbl tanks

(2) Production Facilities (Pump jacks, separators, etc.): If oil, one 114 pump jack & a heater-treater; if gas, a dehydrator.

(3) Oil Gathering Lines: 2" lines to heater-treater and tanks

(4) Gas Gathering Lines: 3" lines - main gas line is ½ mile west

(5) Injection Lines: None

(6) Disposal Lines: None

(7) Are Lines Buried? New lines will be buried

B. (1) Are Any Facilities Planned Off Well Pad? Gas lines
If so, describe: If the well is successful, a 3" gas line will be laid and buried (3' or more) to main line.

(2) Give Dimensions of These Facilities: 3" lines

(3) Construction Methods and Materials: Trench (at least 3' deep) dug with back-hoe or trenching machine.

(4) Protective Measures for Livestock & Wildlife: Trench will be covered.

C. Plan for Rehabilitation after Production Ceases: Site will be graded and levelled for production equipment; pits folded in or fenced. After production ceases, site will be restored as in Item 10 below.

5. Location & Type of Water Supply: (See attached Maps)

A. Type of Water Supply: Water hole in Nash Wash near Cunningham Ranch.

B. Method of Transporting Water: By truck from water hole to location (about 4½ miles)

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

6. Source of Construction Materials:

A. (See attached map & describe) None needed

B. Identify if Federal, Indian, or Fee Land: NA

C. Describe Material: (Where from & How used) NA

D. (See item 1-C and 2 above)

7. Waste Disposal:

(1) Cuttings: Will be deposited into reserve pit (See Plat #3)
(2) Drilling Fluids: In mud tanks; excess in reserve pit
(3) Producing Fluids (oil or water): Oil in tanks; water in reserve pit.
(4) Human Waste: Toilet
(5) Garbage & Other Waste: (Burn pit will be fenced to prevent scattering of debris by wind) Into burn pit.
(6) Clean-up: (See item 10 below) All debris and excess material and equipment will be removed from the site.

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

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

(1) Describe cuts or fills: See Plat #4 for cuts and fills. A 3-ft cut on the south side of the location will be moved to the north side to make location level.
(2) Describe pits, living facilities, soil stockpiles: Reserve pit will be long & narrow as shown and will be about 4' deep. The burn pit will be 4'X6'X6' deep and fenced. The top soil (12" deep) will be piled at the east side. Two or three house trailers will be used for supervisory personnel.
(3) Rig Orientation, Pipe rack, Access Road Entrance etc.: (See Plat #3)
(4) Are Pits Lined? Unlined and about 4 ft. deep.

10. Plans For Restoration:

A. If Well is Completed: Well site will be cleaned, debris and excess equipment and material will be removed, pits covered or fenced; and site levelled for production equipment.

B. If Well is Abandoned:

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

(2) Seeding Location & Access Road: Site will be seeded and scarred as required. The access road will be erased, seeded and scarred. Water bars will be placed on hill side.

(3) Will pits be fenced or covered? Covered over since little fluid is expected.

(4) Is there any oil in Reserve Pit? Probably none

If so, describe disposal: The usual small amount of excess rig oil left in the reserve pit will be covered over.

(5) When will Restoration Work be Done? As soon as possible, hopefully within 30 days after the rig and equipment have been removed.

11. Description of Land Surface:

(1) Topography & Surface Vegetation: The surface is a gentle slope (about 2°) between a 25-ft. scarp on the south side and a wash on the north side. Sage brush, shad scale, and sparse grass cover the surface.

(2) Other surface activities & ownership: There is no farming, irrigation, power sites, lines, or dams in the area. Grazing and well drilling are the main activities. The land is federal and both mineral and surface rights are owned by the public.

(3) Describe other dwellings, archaeological, historical, or cultural sites: There are no building, archaeological, historical, or cultural sites in the area.

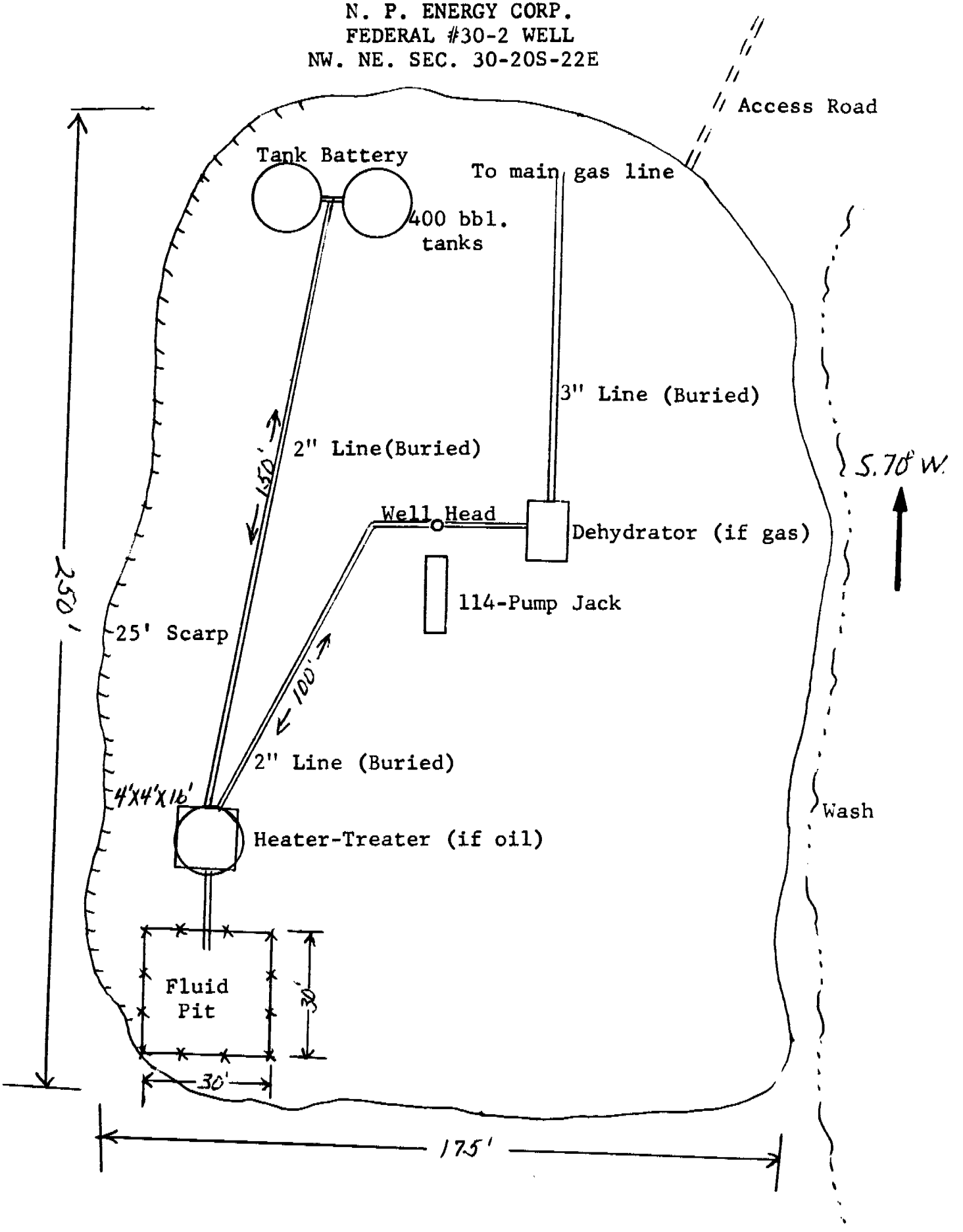
12. Operators Representative: (Give address & phone number)
W. Don Quigley, 57 West South Temple, Salt Lake City, Utah 84101
801-359-3575

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 N. P. Energy Corporation and its contractors in conformity with this plan and terms and conditions under which it is approved.

Date: January 15, 1979

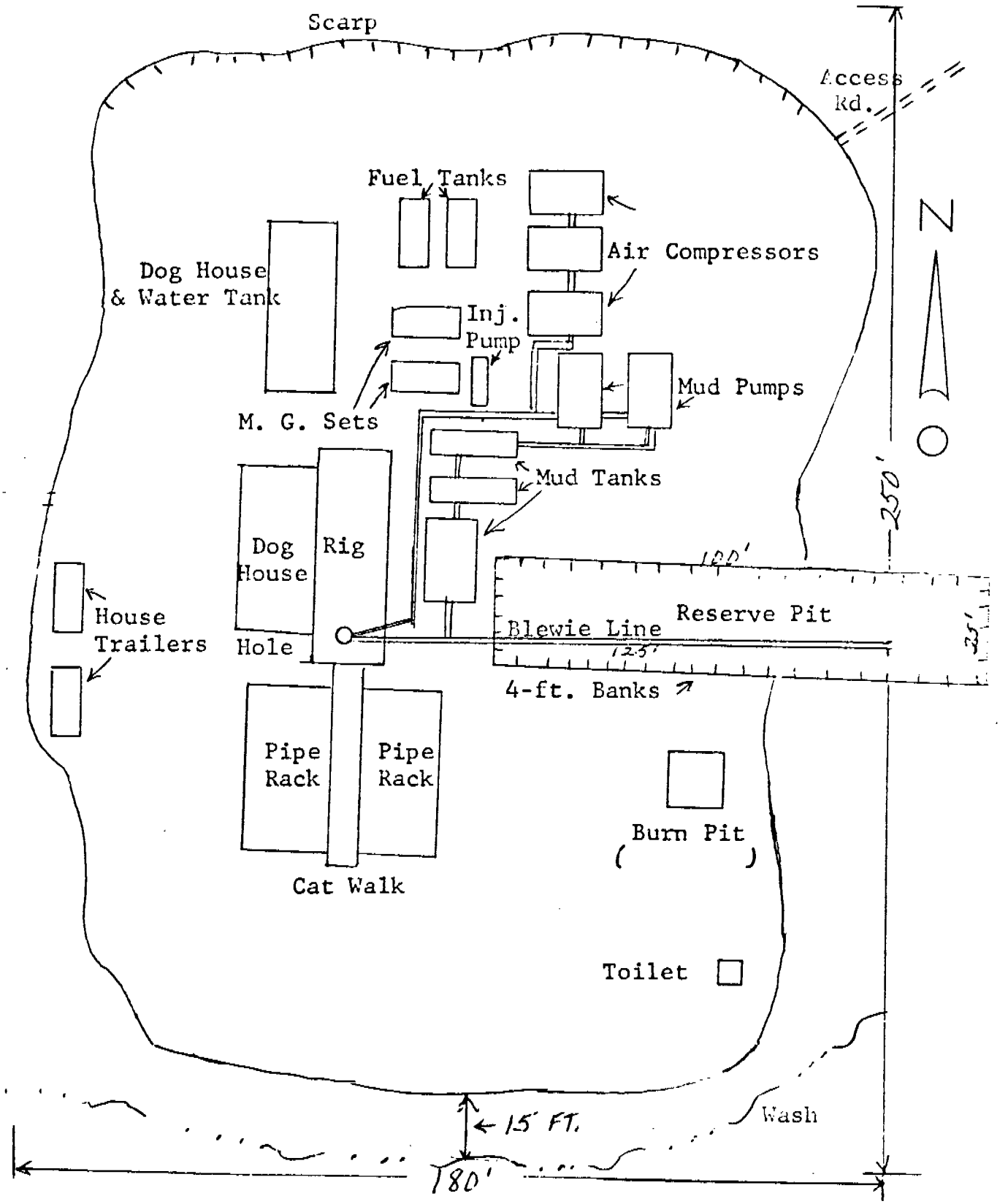
Name: W. Don Quigley
Title: Consulting Geologist

PLAN FOR PRODUCTION EQUIPMENT
N. P. ENERGY CORP.
FEDERAL #30-2 WELL
NW. NE. SEC. 30-20S-22E



PLAT NO. 2

LOCATION PLAN FOR
N. P. ENERGY CORP.
FEDERAL #30-2 WELL
NW. NE . SEC. 30 -20S-22E



Scale: 1 in. = approx. 30 ft.

Plat No. 3

U. S. GEOLOGICAL SURVEY - CONSERVATION DIVISION

FROM: : DISTRICT GEOLOGIST, [redacted], SALT LAKE CITY, UTAH

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

SUBJECT: APD MINERAL EVALUATION REPORT LEASE NO. U-12702

OPERATOR: N. P Energy Corp WELL NO. Fed #30-2

LOCATION: SW ¼ NW ¼ NE ¼ sec. 30, T. 20S, R. 22E, SLM

Grand County, Utah

---

1. Stratigraphy:

Operator projected tops are reasonable.

2. Fresh Water: Thin, lenticular sandstone units in the Mancos shale may contain usable (?) water at depths of less than 500'.

3. Leasable Minerals:

Geothermal potential of Cisco Dome area has yet to be tested.

4. Additional Logs Needed:

Record well temperatures

5. Potential Geologic Hazards:

None anticipated

6. References and Remarks:

Within ½ mi. of Cisco Dome KGS

Signature: CB McDonald Date: 1-25-79

Oil and Gas Drilling

EA No. 179-79

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

Usual Environmental Analysis

Lease No. U-12702

Operator N. P. Energy Co. Well No. 30-2

Location 1927' FEL 632' FNL Sec. 30 T. 20S R. 22E

County Grand State Utah Field Cisco Dome

Status: Surface Ownership Public Minerals Federal

Joint Field Inspection Date April 11, 1979

Participants and Organizations:

Rocky Curnutt	Bureau of Land Management
John T. Evans	U. S. Geological Survey
Don Quigley	Operator's Representative
Don Condie	Jacob's Drilling

Related Environmental Analyses and References:

(1) Book Mountain Unit Resource Analysis, Bureau of Land Management, Utah

(2)

→ Access road relocated → Well site moved to 632' FNL & 1927 FEL Pad 180 x 250 Pit 25 x 100 1/4 mi new road

Analysis Prepared by: John T. Evans, Environmental Scientist, Grand Junction

Date May 14, 1979

NOTED JOHN T. EVANS, JR.

See Oper Proposal loc & access road incl.

Flowline on Stockpile topsoil 2 ac

Proposed Action:

On February 26, 1979, N. P. Energy Corp. filed an Application for Permit to Drill the No. 30-2 development well, a 2800' gas test of the Dakota, Cedar Mountain and Morrison Formations; located at an elevation of 4985' in the NE/4, Sec. 30, T20S, R22E on Federal mineral lands and Public surface; lease No. U-12702. As an objection was raised to the wellsite, it was moved to 1927' FEL and 632' FNL. As an objection was raised to the access road, it was changed. See attached letter from operator for details of proposed changes.

A rotary rig would be used for the drilling. An adequate casing and cementing program is proposed. Freshwater 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 and 13-Point Surface Protection Plans are on file in the U.S.G.S. District Office in Salt Lake City, Utah, and the U.S.G.S. Northern Rocky Mountain Area Office in Casper, Wyoming.

A working agreement has been reached with the 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' wide x 250' long and a reserve pit 25' x 100'. A new access road would be constructed 18' wide x 0.25 mile long from an existing and improved road. The operator proposes to construct production facilities on disturbed area of the proposed drill pad. If production is established, plans for a gas flowline would be submitted to the appropriate agencies for approval. The anticipated starting date is June 1979 and duration of drilling activities would be about seven days.

Location and Natural Setting:

The proposed drillsite is approximately 13 miles NW of Cisco, Utah, the nearest town. A fair road runs to within 0.25 mile of the location. This well is in the Cisco Dome Field.

Topography:

The proposed location is on a gentle slope between a 30' scarp and wash.

Geology:

The surface geology is Mancos. The soil is silty clays and shales. 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.

NOTED JOHN T. EVANS, JR.

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

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

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

Soils:

No detailed soil survey has been made of the project area. The topsoils 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.

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

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

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

NOTED JOHN T. EVA

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. Operator to control dust from blooie line by misting or other approved means.

Precipitation:

Annual rainfall 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 rainstorms. This type of storm is rather uncommon as the annual precipitation is around 8".

Winds are medium and gusty, occurring predominantly from West to East. Air mass inversions are rare. The climate is semiarid with abundant sunshine, hot summers and cold winters with temperature variations on a daily and seasonal basis.

Surface Water Hydrology:

Drainage is to Strychnine Wash. The original location was moved to avoid placing reserve pit in and near existing drainage pattern.

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.

Groundwater Hydrology:

Some minor pollution of groundwater systems would occur with the introduction of drilling fluids (filtrate) into the aquifer. This is normal and unavoidable during rotary drilling operations. The potential for communication, contamination, and commingling of formations via the well bore would be possible. The drilling program is designed to prevent this. There is need for more data on hydrologic systems in the area and the drilling of this well may provide some basic information

as all shows of fresh water would be reported. Water production with the gas would require disposal of produced water per the requirements of NTL-2B. The depths of freshwater 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:

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

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

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

Wildlife:

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

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 are 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.

The overall effect of oil and gas drilling and production activity is significant in Grand County but it is difficult to assess the environmental impact of a single well on state and/or national levels. However, if said well was to produce in sufficient quantity, additional development wells might be anticipated. This additional development, in turn, would lead to greater environmental and socioeconomic consequences.

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. 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.

Alternatives to the Proposed Action:

1) Not Approving the Proposed Permit--The Oil and Gas Lease grants the lessee exclusive right to drill for, mine, extract, remove and dispose of all oil and gas deposits. Under leasing provisions, the Geological Survey has an obligation to allow mineral development if the environmental consequences are not too severe or irreversible. Upon rehabilitation of the site, the environmental effects of this action would be substantially mitigated, if not totally annulled. Permanent damage to the surface and subsurface would be prevented as much as possible under U.S.G.S. and other controlling agencies' supervision with rehabilitation planning reversing almost all effects. Additionally, the growing scarcity of oil and gas should be taken into consideration.

2) Minor relocation of the wellsite and access road ~~would~~ reduced the environmental impact. There are no severe vegetative, animal or archaeological-historical-cultural conflicts at the site. 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.

Adverse Environmental Effects Which Cannot Be Avoided:

Surface disturbance and removal of vegetation from approximately two acres of land surface for the lifetime of the project which would result in increased and accelerated erosional potential. Grazing would be eliminated in the disturbed areas and there would be a minor and temporary disturbance of wildlife and livestock. Minor induced air pollution due to exhaust emissions from rig engines of support traffic engines would occur. Minor increase in dust pollution would occur due to vehicular traffic associated with the operation. If the well is a gas producer, additional surface disturbance would be required to install production pipelines. The potential for fires, leaks, spills of gas, oil or water would exist. During the construction and drilling phases of the project, noise levels would increase. Potential for subsurface damage to freshwater 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 irreplacable and irretrievable commitment of resources would be made. Erosion from the site would eventually be carried as sediment in the Colorado River. The potential for pollution to Strychnine Wash would exist through leaks and spills.

If well is a producer, other development wells would be anticipated with substantially greater environmental and economic impacts.

RES. PHONE 801-295-1870 RES. PHONE 801-359-3575

W. DON QUIGLEY

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

16 APR REC'D

April 13, 1979

Mr. Ed Guynn
Oil & Gas Division
U. S. Geological Survey
Salt Lake City, Utah 84111

Mr. Del Backus
District Office
Bureau of Land Management
Moab, Utah 84532

Mr. Cleon Feight
Oil & Gas Division
Dept. of Natural Resources
Salt Lake City, Utah 84116

Re: Re-location of N. P. Energy
#30-2 Well

Dear Sirs:

During an on-site inspection of the proposed drill-site for the N. P. Energy Fed. #30-2 well in the NW. NE. of Section 30, T 20S, R 22E, Grand County, Utah, personnel from U. S. Geological Survey and Bureau of Land Management objected to the proximity of the proposed site to the edge of an active wash due to the incompetence of the banks of the wash. Accordingly, it was agreed to move the location 200' N. 70° E. Thus the relocated site is 1927' from the E-line and 632' from the N-line of Sec. 30-20S-22E. The elevation remains the same. (See attached Plat #1.)

To obtain further stability for the reserve pit, the rig orientation was changed to north-south and the reserve pit will be placed on the west side of the location. (See attached Plat #3.)

It was further agreed to relocate the access road to take advantage of better base for the road and a more gentle incline off the scarp to the south and west of the well site. The attached map shows the relocation of the access road.

Sincerely yours,

W. Don Quigley

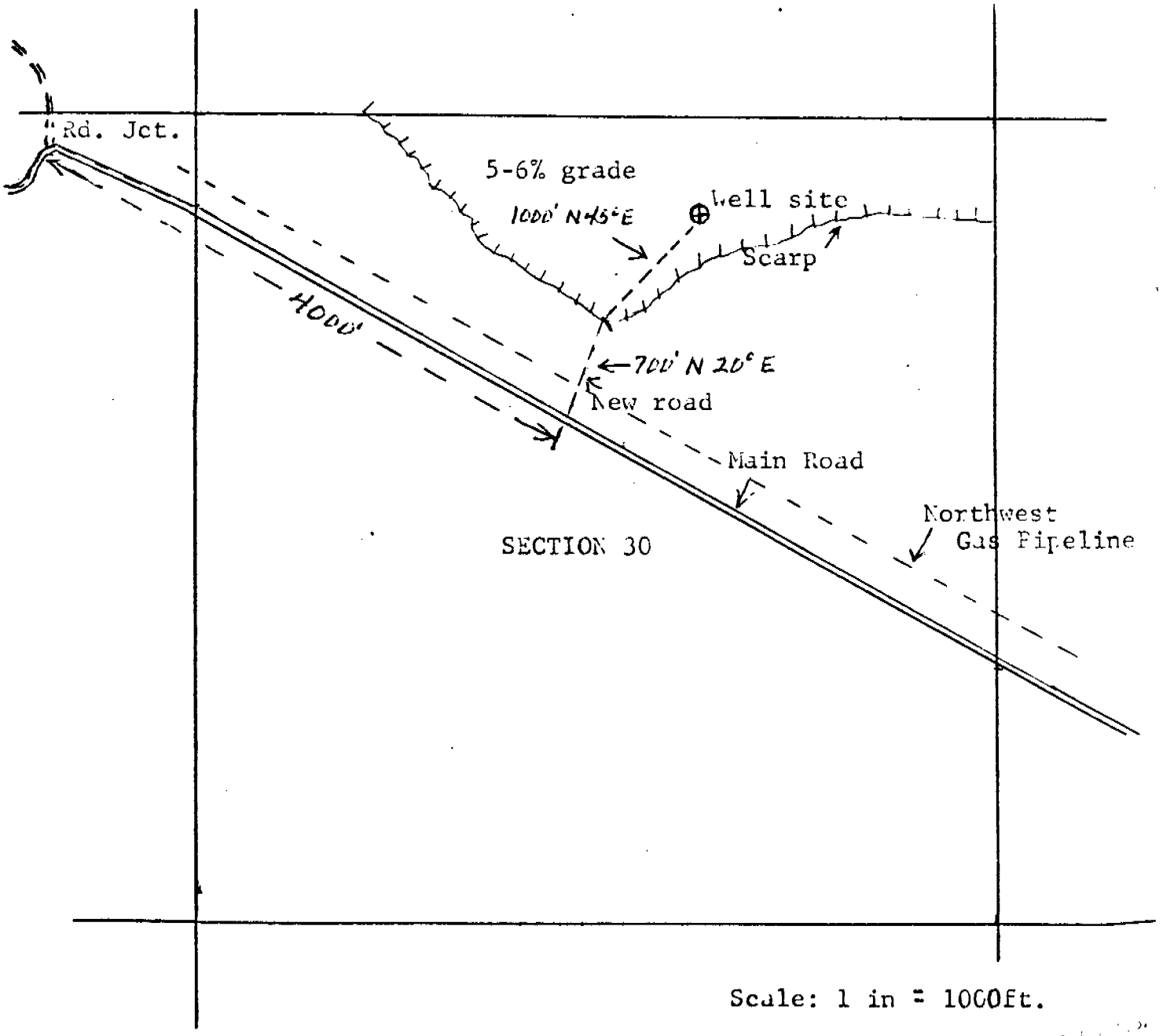
W. Don Quigley

Enclosure

cc: N. P. Energy
Jacobs Drilling Co.
John Evans, U.S.G.S., Grand Junction, Colo. ✓

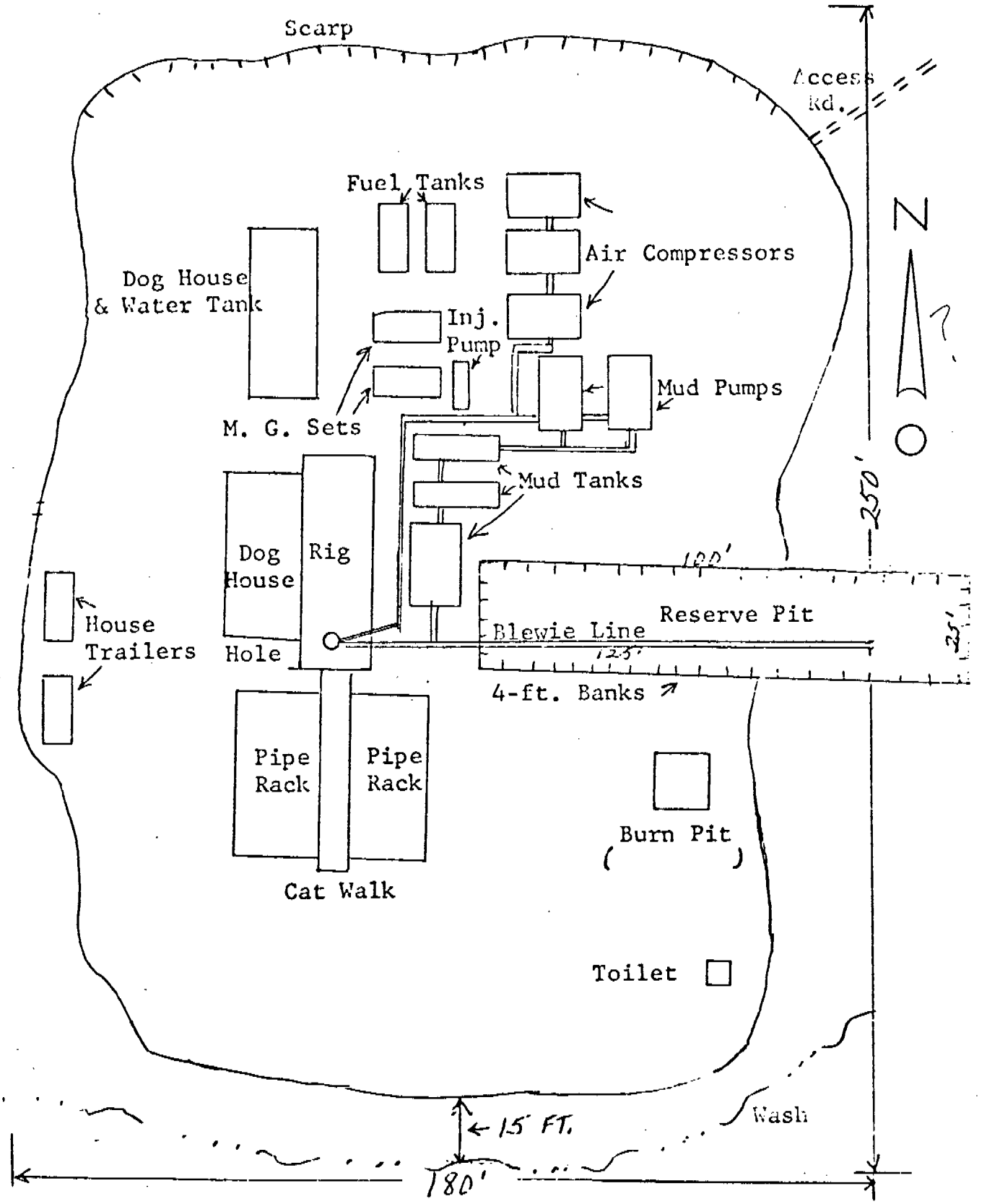
NOTED JOHN T. EVANS, JR.

SKETCH OF NEW ACCESS ROAD
TO
N.P. ENERGY CORP.
FED.#30-2 WELL
NW.NE.SEC.30-20S-22E,SLM



Scale: 1 in = 1000ft.

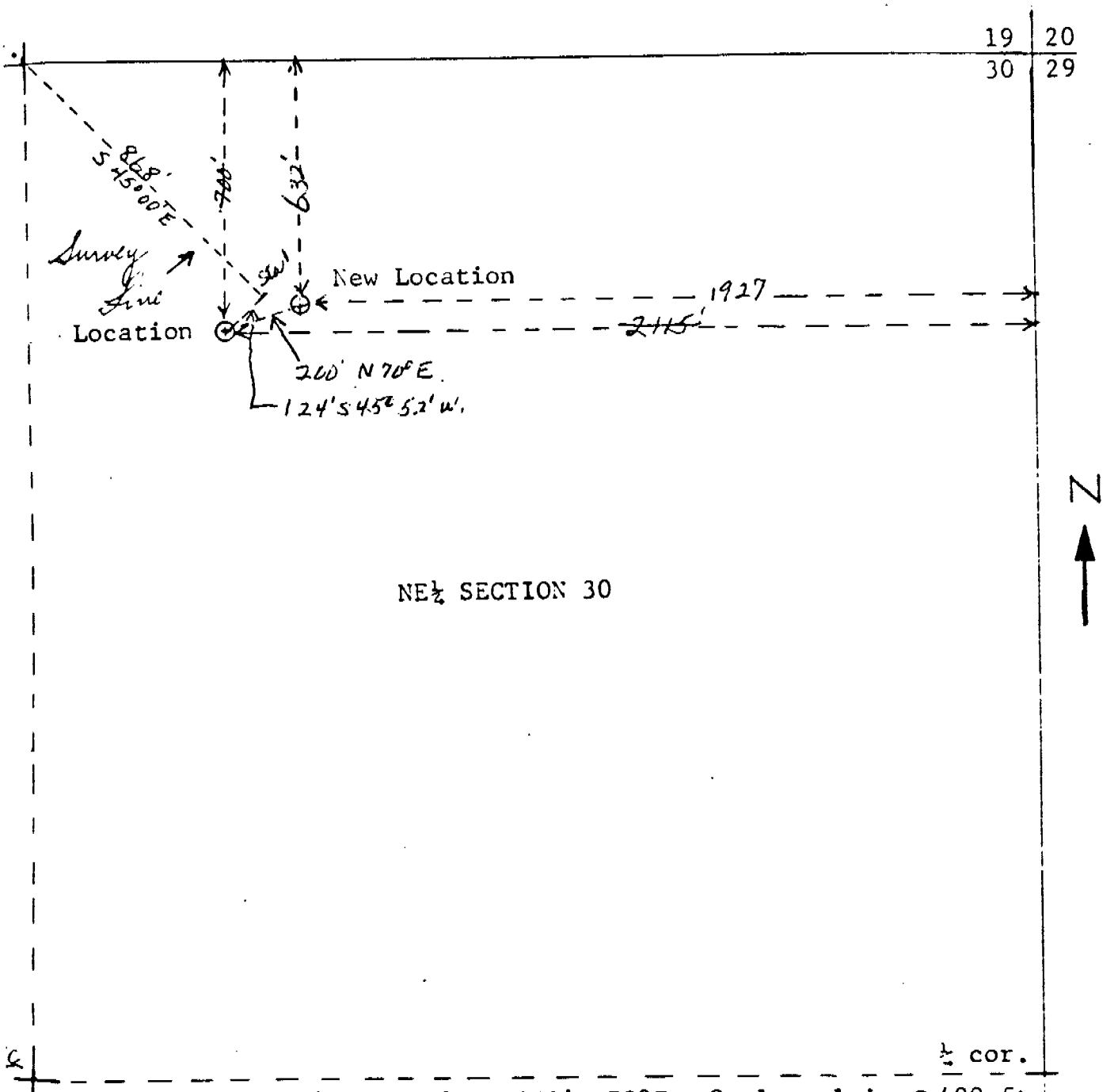
LOCATION PLAN FOR
N. [illegible]. ENERGY CORP.
FEDERAL #30-2 WELL
NW. NE . SEC. 30.-20S-22E



Scale: 1 in. = approx. 30 ft.

NOTED JOHN T. EVANS, JR.

LOCATION PLAT FOR
N. P. ENERGY CORPORATION
FEDERAL #30-2 WELL
NW. NE. SEC. 30-20S-22E
(632' fr. N-line & 1927' fr. E-line)
GRAND COUNTY, UTAH
Elev: 4987' grd.



Ref. pts. are 150' N; 100' S; 150' N70°E & 150' S70°W

Scale: 1 in. = 400 ft.
Date: December 18, 1978

erman D. Gardner, do hereby certify that plat was plotted from notes of a field y made under my direct supervision, re- ibility and checking on December 16, 1978.

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

NOTED JOHN T. EVANS, JR.

PLAT NO. 1

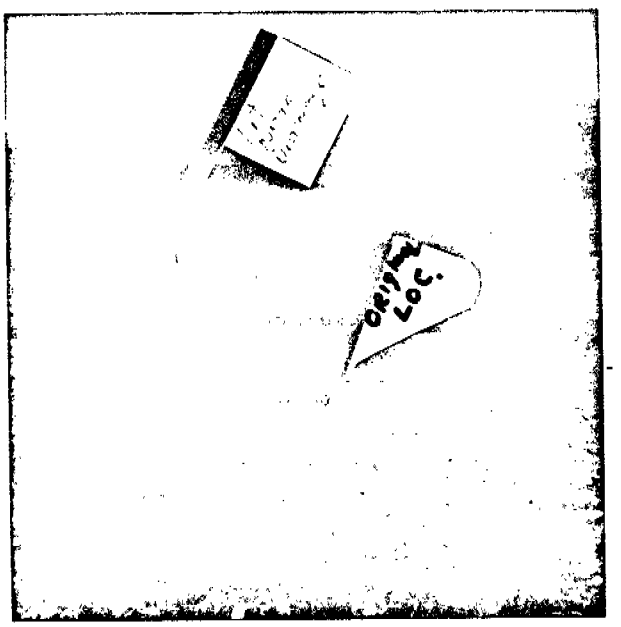
EA No. 179-79

Determination:

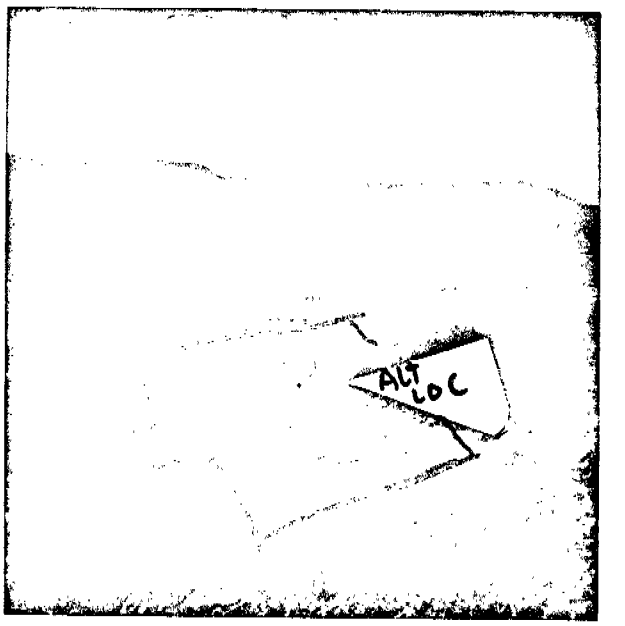
This requested action does not constitute a major Federal action significantly affecting the environment in the sense of NEPA, Sec. 102(2)(C).

5/15/79
Date

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

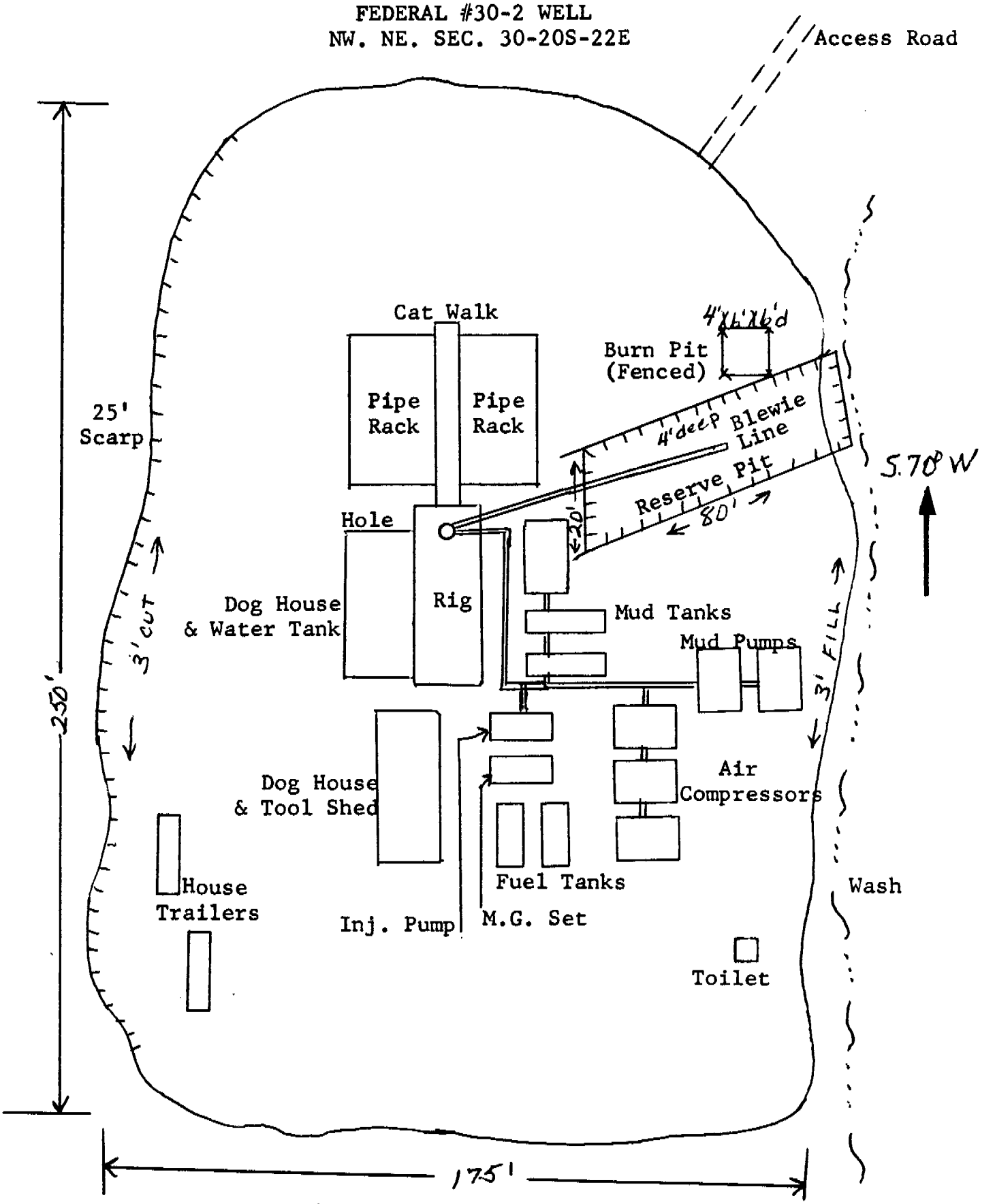


Original Loc 30-2 4-11-79
Loc moved 200 N 70 E



alty Loc 30-2 4-11-79

LOCATION PLAN FOR
N. P. ENERGY CORP.
FEDERAL #30-2 WELL
NW. NE. SEC. 30-20S-22E



Scale: 1 in. = approx. 30 ft.

PLAT NO. 3

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 [ ] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR
N. P. Energy Corporation

3. ADDRESS OF OPERATOR
1399 South 7th East, Salt Lake City, Utah 84105

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface
NW. NE. Sec. 30, T 20S., R 22E., S.L.M.
At proposed prod. zone (700' fr. N-line and 2115' fr. E-line)

5. LEASE DESIGNATION AND SERIAL NO.
U-12702

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
NA

8. FARM OR LEASE NAME
Federal

9. WELL NO.
Fed. #30-2

10. FIELD AND POOL, OR WILDCAT
Cisco Dome

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
NW.NE. Sec. 30-20S-22E. S.L.M.

12. COUNTY OR PARISH: Grand
13. STATE: Utah

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
Approximately 13 miles NW. of Cisco, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 700'

16. NO. OF ACRES IN LEASE: 640 acres

17. NO. OF ACRES ASSIGNED TO THIS WELL: 160 acres

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: ½ mile

19. PROPOSED DEPTH: 2800' Entrada

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, ~~etc.~~): 4987' grd; 4997' K.B.

22. APPROX. DATE WORK WILL START*: Feb. 15, 1979

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#	200'	100 sks
6½"	4½"	10.50#	thru pay zone	and cemented to 200' above Kd.

It is planned to drill a well at the above location to test the gas and/or oil production possibilities of the sands in the Dakota, Cedar Mt., Morrison, and Entrada formations. The well will be drilled to approximately 50 to 100 ft. below the top of the Entrada formation, if conditions permit. The well will be drilled with rotary tools, using air for circulation. The surface casing (7 5/8") will be set at about 200' K.B. and cemented with returns to the surface. A blowout preventer and rotating head will be installed on top of the surface casing. Fill and kill lines will be connected to the well head below the blind rams on the blowout preventer. Any gas encountered will be flared at the end of the blewie line, and roughly checked for volume thru a 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 of 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 [signature] TITLE President DATE January 12, 1979

(This space for Federal or State office use)

PERMIT NO. 43-019-30492 APPROVAL DATE

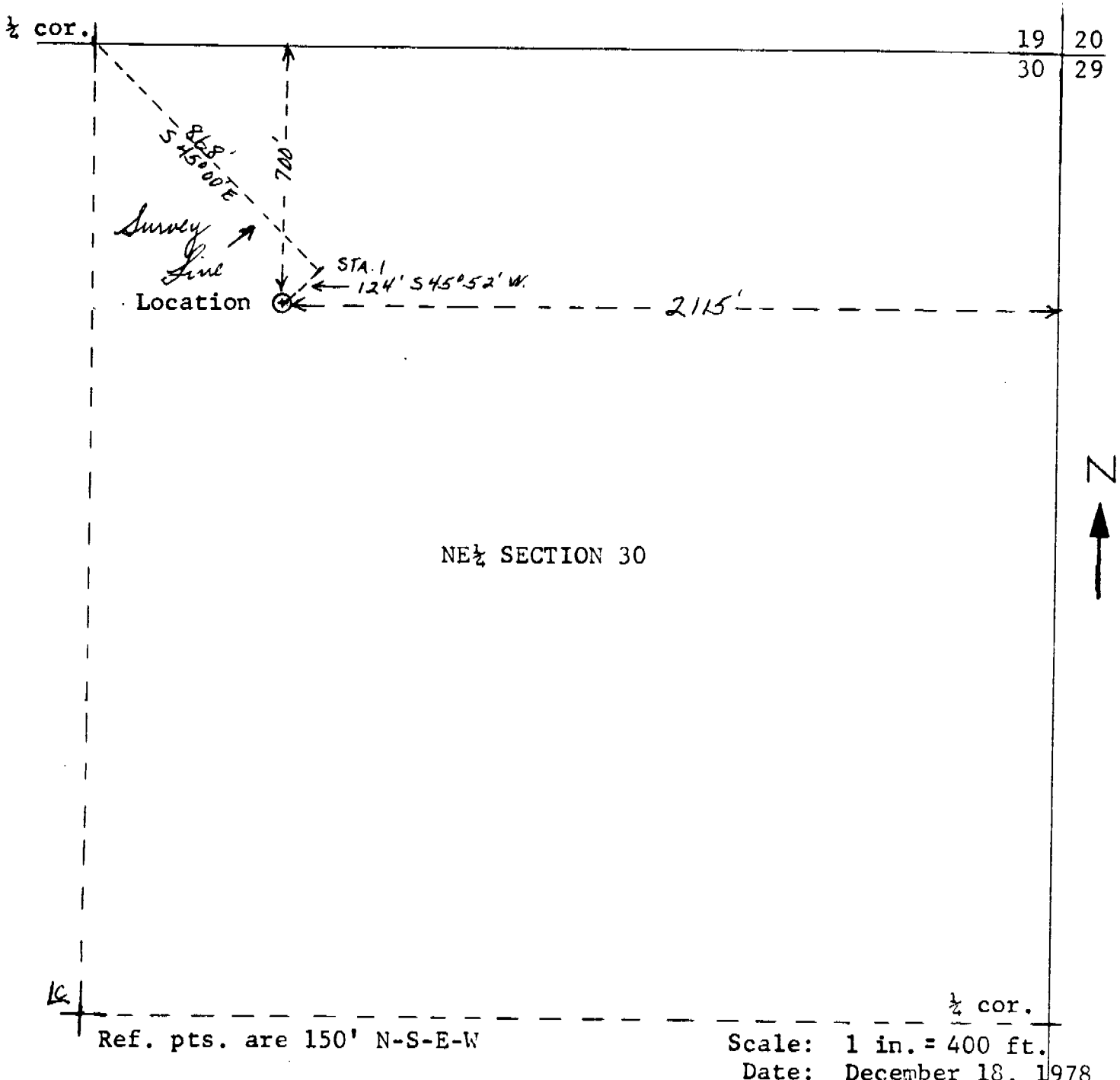
APPROVED BY TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

RECEIVED JAN 18 1979

*See Instructions On Reverse Side

LOCATION PLAT FOR
N. P. ENERGY CORPORATION
FEDERAL #30-2 WELL
NW. NE. SEC. 30-20S-22E
(700' fr. N-line & 2115' fr. E-line)
GRAND COUNTY, UTAH
Elev: 4987' grd.



Ref. pts. are 150' N-S-E-W

Scale: 1 in. = 400 ft.
Date: December 18, 1978

I, Sherman D. Gardner, do hereby certify that this plat was plotted from notes of a field survey made under my direct supervision, responsibility and checking on December 16, 1978.

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

PLAT NO. 1

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

** FILE NOTATIONS **

Date: Jan. 22 -

Operator: M. P. Energy

Well No: Fed. 30-2

Location: Sec. 30 T. 20S R. 22E County: Grand

File Prepared: / ✓ / *Entered on N.I.D.:* / ✓ /

Card Indexed: / ✓ / *Completion Sheet:* / ✓ /

✓ *API NUMBER:* 43-019-30492

CHECKED BY:

Administrative Assistant AW

Remarks: 30-1 - SW NW, No other wells

Petroleum Engineer MJM 1-30-79

Remarks:

Director 7

Remarks:

INCLUDE WITHIN APPROVAL LETTER:

Bond Required: OK Ind. *Survey Plat Required:* / /

Order No. 102-8 / ✓ / *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~~*

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

I. DANIEL STEWART
Chairman

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

February 9, 1979

N.P. Energy Corporation
1399 South 7 East
Salt Lake City, Utah 84105

Re: Federal 30-2
Sec. 30, T. 20 S, R. 22 E,
Grand County, Utah

Gentlemen:

Insofar as this office is concerned, approval to drill the above referred to well is hereby granted in accordance with the Order issued in Cause No. 102-8.

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.

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 43-019-30492.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

CLEON B. FEIGHT
Director

cc: U.S. Geological Survey

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

ok P

April 13, 1979

Mr. Ed Guynn
Oil & Gas Division
U. S. Geological Survey
Salt Lake City, Utah 84111

Mr. Del Backus
District Office
Bureau of Land Management
Moab, Utah 84532

Mr. Cleon Feight
Oil & Gas Division
Dept. of Natural Resources
Salt Lake City, Utah 84116

RECEIVED APR 16 1979 GAS & MINING

Re: Re-location of N. P. Energy #30-2 Well

2 wells (gas) in same section?

Dear Sirs:

During an on-site inspection of the proposed drill-site for the N. P. Energy Fed. #30-2 well in the NW. NE. of Section 30, T 20S, R 22E, Grand County, Utah, personnel from U. S. Geological Survey and Bureau of Land Management objected to the proximity of the proposed site to the edge of an active wash due to the incompetence of the banks of the wash. Accordingly, it was agreed to move the location 200' N. 70° E. Thus the relocated site is 1927' from the E-line and 632' from the N-line of Sec. 30-20S-22E. The elevation remains the same. (See attached Plat #1.)

To obtain further stability for the reserve pit, the rig orientation was changed to north-south and the reserve pit will be placed on the west side of the location. (See attached Plat #3.)

It was further agreed to relocate the access road to take advantage of better base for the road and a more gentle incline off the scarp to the south and west of the well site. The attached map shows the relocation of the access road.

Sincerely yours,

W. Don Quigley

W. Don Quigley

Enclosure

cc: N. P. Energy
Jacobs Drilling Co.
John Evans, U.S.G.S., Grand Junction, Colo.

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] DRY [ ] Other

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

2. NAME OF OPERATOR: N. P. Energy Corporation

3. ADDRESS OF OPERATOR: Suite 320, 57 W. So. Temple, S.L.C., Utah 84101

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface: NW. NE. Sec. 30, T 20S, R 22E., S.L.M.
At top prod. interval reported below: 632' fr. N-line and 1927' fr. E-line
At total depth:

5. LEASE DESIGNATION AND SERIAL NO.: U-12702
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT AGREEMENT NAME:
8. FARM OR LEASE NAME: Federal
9. WELL NO.: Fed. #30-2
10. FIELD AND POOL, OR WILDCAT: Cisco Dome
11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: NW.NE. Sec. 30-20S-22E. S.L.M.
12. COUNTY OR PARISH: Grand
13. STATE: Utah

14. PERMIT NO. | DATE ISSUED

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (Ready to prod.)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
10-13-79	10-19-79	10-25-79	4987' grd; 4997' K.B.	4988'

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
2830'	2053'	One	→	0-2830'	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 1640-1840' (Mancos)

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: Dual-Induction-Laterolog; Gamma-Density-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
8 5/8"	24.00#	211'	12¼"	125 sks	None
4½"	10.50#	2016'	7 7/8"	None	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
	None			

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 3/8" O.D.	1990'	None

31. PERFORATION RECORD (Interval, size and number)
Open-Hole

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
None	

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)
None	Swabbing	Shut-in

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
None			→	?	None	None	

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
None		→	Est. 8-10?			

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.): None

TEST WITNESSED BY:

35. LIST OF ATTACHMENTS: Drilling History, Completion History, and Geologic Report

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

SIGNED: N. Alan Gingley TITLE: Vice-President DATE: Jan. 14, 1980

RECEIVED
JAN 18 1980
DIVISION OF OIL, GAS & MINING

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

DRILLING HISTORY,

COMPLETION HISTORY,

AND

GEOLOGIC REPORT

ON

N. P. ENERGY - FEDERAL #30-2 WELL

GRAND COUNTY, UTAH

By

W. DON QUIGLEY

CONSULTANT

SALT LAKE CITY, UTAH

January 14, 1980

DRILLING HISTORY,
COMPLETION HISTORY,
AND
GEOLOGIC REPORT
ON
N. P. ENERGY - FED. #30-2 WELL

Operator: N. P. Energy Corporation
Suite 320, 57 West South Temple, Salt Lake City, Utah 84101

Contractor: Jacobs Drilling Co.
2467 Commerce St., Grand Junction, Colo 81501

Location: NW. NE. Sec. 30, T 20S, R 22E, S.L.M., Grand County, Utah (632' fr. N-line and 1927' fr. E-line)

Elevations: 4987' grd.; 4997' K.B.

Spudded-in: Oct. 13, 1979

Surface Casing: 5 jts. 8 5/8", 24.00#, K-55, R-3, landed at 211' K.B. and cemented w/125 sks reg. cement w/3% CaCl. Returns to surface.

Finished Drlg: Oct. 19, 1979

Total Depth: 2830'

Production Casing: 41 jts. of 4½", 10.50#, K-55, R-3 casing landed at 2016' K.B. w/Texas shoe on bottom and bottom two joints slotted. No cement - hung from surface.

Plugged Back Depth: 2053'

Producing Formation: Mancos

Producing Interval: 1640' to 1840'

Perforations: None - Open hole completion

Completion Date: October 25, 1979

Initial Production Rate: Unknown at this time. Estimate 6 to 8 bbl. per day when cleaned out.

Drilling History

Oct. 12: Moving in Jacobs Drlg. Co. Rig #2 and rigging up.

Oct. 13: Finished rigging up. Drilled 12¼" surface hole from 0' to 156'. Drilled rat hole.

Oct. 14: Drilled 156' to 214' (58'). Finished drilling surface hole. Ran 5 jts. of 8 5/8", 24.00#, K-55, R-3 casing w/3 centralizers and landed at 211' K.B. Cemented casing w/125 sks reg. cement w/3% CaCl. Had returns to the surface. Waited 8 hrs. for cement to set. Began nippling up.

Oct. 15: Drilled 214' to 921' (707'). Finished nippling-up. Drilled mouse hole. Drilled out cement and tested B.O.P. and casing to 2000#. No leaks. Drilled ahead with 7 7/8" bit and using air for circulation. Survey at 246' was 3/4°. Survey at 550' was 1°. Survey at 845' was 3/4°. Drilling at avg. rate of 40 ft/hr. in Mancos.

Oct. 16: Drilled 921' to 1768' (847'). Survey at 1260' was 1½°. Survey at 1725' was 1 3/4°. Made rd-trip at 1751' for button bit. Bit #2 (Reed-Y13J) made 1537' (214' to 1751') in 32½ hrs. Drilled at avg. rate of 48 ft/hr. On trip out, the bottom 500 feet of drill pipe and collars were covered with green oil. Samples were oil stained and soaked from 1630' to 1750'. This is Mancos shale.

Oct. 17: Drilled 1768' to 2495' (727'). Estimate top of Dakota at 2020' due to limestone and black silty shale and v.f.g. dirty ss. w/oil stain and fluorescence. No gas to surface. Estimate top of Cedar Mt. at 2120' due to first green shale. Had a sand at 2100' to 2120' which was c.g., rounded, with fluor. but was wet and had to convert to air-mist drilling. Estimate top of Morrison at 2190' due to bright red shale and reverse drilling break, and at base of m.g. sandstone (Buckhorn). No shows or gas to surface from the Cedar Mt. Brushy Basin section had no shows or gas. Estimate top of Salt Wash at 2420'. Sand at top was v.f.g. to m.g. with good solid fluor., but no gas to surface. Shows could be due to oil up the hole.

Oct. 18: Drilled 2495' to 2830' T.D. (335'). Other sands in the Salt Wash had shows but no gas or oil were seen in the returns. Est. top of Curtis-Summerville at 2710 ft. due to red siltstone and shale and cherty limestone. Top of Entrada was at 2780'. Entrada was m.g., clear, rounded sandstone with no shows. Had a marked increase in the amount of water. Mudded-up and circulated hole for 4 hrs. Waited on loggers. Had to use Birdwell. Logged well and decided to plug bottom of hole and complete Mancos oil section open-hole. Laid down drill collars.

Oct. 19: Went in hole with drill pipe (open-ended) and place cement plugs as follows:

Plug #1: 2830' to 2680' (50 sks) across Entrada

Plug #2: 2550' to 2400' (50 sks) across top of Salt Wash

Plug #3: 2230' to 2080' (50 sks) across top of Morrison, thru Cedar Mt., and base of Dakota

Waited 6 hours for cement to set and went in hole to tag the top of the top plug. Found top at 2053' K.B. Came out of hole laying down drill pipe.

Oct. 20: Ordered casing for well. Ran 41 jts of 4½", 10.50#, K-55, R-3 casing with Texas shoe on bottom and bottom 2 jts. slotted. Landed casing at 2016' K.B. No cement - Open hole. Set casing on slips in casing head and installed tubing head.

Completion History

Oct. 20: Ran 2 3/8" O.D. tubing with drilling rig. Seating nipple landed at 1990' K.B. (64 jts. of tubing in well). Began swabbing mud from well. Made 11 runs and swab line parted at top flag dropping swab and 100' of line in tubing.

Oct. 21: Pulled tubing and stripped out line and swab. Poured new rope socket. Went in hole with swab but swab would go down for some reason. Possible tight spot in tubing.

Oct. 22: Pulled swab out and changed cups and went in hole with swab, and began swabbing out more mud. Began getting oil

on top of mud. Top 20' of each run was oil cut. Swabbed mud down to bottom. Pulling only about 50 feet of fluid on last several runs. Oil coming in very slowly. Released drilling rig, and plan to bring in a swab rig at a later date.

Dec. 3: Moved-in Fowler Well Service rig. Rigged-up. Moved tank from Fed. #32-1 well to #30-2. Laid 2" line from well head to tank. Found 750' of fluid in hole. Swabbed muddy water with shale cuttings. No oil or gas. Swabbed out about 15 bbl fluid.

Dec. 4: Continued swabbing fluid from well into pit. Drained tank into pit. Well making small amount of muddy fluid with trace of oil. Made a run every 30 minutes.

Dec. 5: Found 200' of fluid in hole overnight. Continued swabbing. Well making small amount of muddy water with trace of oil.

Dec. 6: Found 225' of fluid in hole overnight. Continued swabbing. Small amount of muddy water with trace of oil.

Dec. 7: 200' of fluid overnight. Swabbed well down and rigged down.

Note: It is quite probable that production zone is blocked off and well will have to be cleaned out with a cable tool. The mud has damaged the production zone in the Mancos considerably. Work on the well is being suspended until a cable tool is available.

W. Don Quigley

W. Don Quigley

GEOLOGIC REPORT
ON
N. P. ENERGY - FED. #30-2 WELL

1. The N. P. Energy Corporation Federal #30-2 Well is located on the southeast flank of the Cisco Dome Anticline. The well site was chosen to ascertain if the productive limits of the lenticular sands in the Dakota, Cedar Mountain, and Morrison formations extended this far down the east and south flanks of the structure. The results of the well would suggest that this position, as well as others further east and south, are certainly less favorable for commercial production. A number of lenticular sands were present in the various formations; but no gas or oil was obtained at the surface during the drilling operations with air or air-mist. It has never been established that low structural or synclinal positions of well sites are without possibilities of production in the general area; but certainly experience and past history definitely show that the anticlinal or higher structural positions are by far more favorable for successful completions.

2. The subject well topped the Dakota formation at 2027' (2970' datum) which was about 30 feet lower than the 3000' datum, which had been predicted. The Dakota had one thick massive sand, 2020' to 2065', which had shows but no free gas or oil. Water was obtained at the bottom of the sand, necessitating conversion to air-mist drilling.

3. Neither the Cedar Mountain or Morrison formations had any productive sand lenses. Several sand lenses were present, but they gave up no free hydrocarbons while drilling operations were underway. Some of these sands had fluorescence and oil staining, but it is believed that these shows may have been due to the oil obtained up the hole in the Mancos formation.

4. The subject well was drilled to 2830' which was about 50 feet below the top of the Entrada formation, logged electrically, and then plugged back to 2050'. Casing, 4½", was run and hung from the surface; and an open hole completion was made on the Mancos oil section found at 1640' to 1840'. It was felt that the mud and air-mist water undoubtedly damaged this zone and it might take considerable coaxing and patience to get it

to produce. Consequently, only a minimum of work will be done, until there has been ample time for the zone to cure itself. It is believed that cleaning out of the shale cavings, etc. at the bottom of the hole will be required before the well can produce. This will have to be done with a cable tool and will be done when one is available.

5. The formations with their tops, thicknesses, and Datum points, which were encountered in the subject well, as determined from the E-logs, are as follows:

Formation	Depth to Top	Thickness	Datum
Mancos *	Surface	2027'	4997' K.B.
Dakota *	2027'	91'	2970'
Cedar Mt.	2118'	72'	2879'
Morrison (Brushy Basin)	2190'	230'	2807'
(Salt Wash) *	2420'	290'	2577'
Curtis-Summerville	2710'	70'	2287'
Entrada	2780'	—	2217'
Total Depth	2830'		

*Formations with hydrocarbon shows.

A detailed descriptive log of the samples from the subject well from 1600' to total depth is attached.

6. Comparison of the above data on the #30-2 well with similar data on the #30-1 well located about ½ mile to the southwest, shows comparable sands in both wells, but the #30-2 well failed to give up any hydrocarbons. The #30-1 well is also about 43 feet higher structurally than the subject well.

7. The initial production rate of the oil from the zone, 1640' to 1840', in the Mancos is unknown at this time. In fact, it is not known whether it will produce at all; however, there was definite indication of the potential productive nature of the zone while drilling but the damage caused by the fluids on the formation may not be overcome. It is too soon to predict any production rates or reserves. This will have to wait until more remedial work is accomplished on the well.

W. Don Quigley

W. Don Quigley
Consultant
Salt Lake City, Utah

N[illegible] Energy Corp.
Well # 30-2 Well
NW. NE Sec 30 - 20S - 22E
Elev. 4997' K.B.

Drlg Time min/6-ft

1600 0 10

Dk. gray to blk v. calc mica sh.

V. blk. oily calc. mica sh. + dk brn mica slst. w/fluor. + good cut

1700 Dk. brn calc. mica. sdy slst w/good fluor., oil st. + cut

Some dk brn oil sat v.fg. dsty ss w/good fluor. + oil cut.

Blk. oil soaked sh., non-calc.

1800

Dk. gray silty mica sh w/oil st.

Oil soaked blk. silty sh.-mica.

1900

Dk. gray dns sh.

b Dk gray calc. silty sh.

Lt. brn calc lms + bent.

2000 Dk. gray calc. sh. + brn silty lms.

Blk. sdy sh. w/oil sat. fluor. + cut

Lt brn v.fg. dsty ss. + silt. w/oil st.

Lt. brn v.fg ss. - oil st. - good fluor + cut

Silty

Lt. gray to lt. brn silt.

2100 Wh to clr. cg. rd'd ss. w/fluor - but wet. - converted to air mist

Gray, blk., gray, + brn sh.

Rd. + gray sh. + slst. + wh. qtzitc ss. + brn xln lms

a Gray, gray, lav. sh. + lms + ch + rd sh. + slst.

Wh. fg.-m.g. ang. calc. ss. - no fluor.

Rd., gry., gray. calc. sh. + slst.

2200 Varic. calc. sh. + slst + wh qtzitc ss.

b Lt. gray ang. bent. m.g. ss + lt. gray silic. sh. + varic. sh. + slst.

b Wh. qtzitc ss. + lt. gray + gray sh. + slst.

b Varic. sh. slst., + wh. qtzitc ss.

Rd + pur. sh. + slst. + gray + gray sh.

b Varic. sh. + slst + wh. bent qtz. ss

2300 Mostly rd. slst. + wh. qtzitc ss.

Varic. sh. + slst. + wh. qtzitc ss.

+ lt. brn lms

Mostly gray + gray calc. sh. + slst.

2400 + lt. gray v.fg. calc. ss.

Jan 5W

Gray slst. + brn xln lms.

Wh. v.fg. calc. ss. w/solid lt. blue fluor. w/sl. cut.

Wh. to clr. m.g. loose calc ss w/solid fluor + good cut + calc. m.g. rd'd ss. no fluor

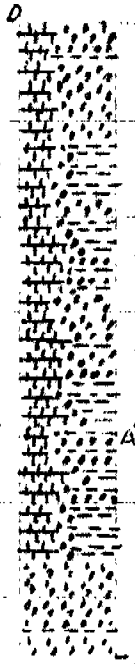
Gray calc. slst + some wh. fg. ss

Clr. m.g. rd'd calc. ss. w/blk oil resid., good fluor + cut

2500 Δ Gray. silic sh. + slst. w/ ch.

Fed # 1-10 Con't

2500 Dolg Lime 5 10



Wh. to clr. m.g. sd'd ss. & gnN sh. NO FLUOR (Prob. WET)
Clr. f.g. sd'd to sub-sd'd calc. ss. - NO FLUOR m.g.
m.g. ss. " " WET.
Varic. calc. sh. & slst.
Rd. calc. slst.
Wh. mg. to fg. calc ss.
Rd. gry, gnN, pur. calc. sh. & slst.
Gry sh., slst & lms
DK gry qtzic ss. & gry calc. slst & lms
*Lt. gry f.g. calc. ss. w/ scat. fluor.
Wh. - clr. mg. sd'd calc ss. - NO FLUOR + dk. gry lms & sh.
Lt. gry f.g. ang. calc ss & gry lms + rd. slst. & gry sh.
Rd. calc. slst. + gnN slst. & gry chty lms & ch
Rd. slst. & Hd qtzic. ss. + Wh.-lt. gry vfg calc ss.
Gry & bnN sdy lms. & gry slst & sh. + wh. vfg. calc. ss.
Rd. calc. slst.
Clr. sd'd m.g. ss. NO FLUOR. CA shows. WET.
+ rd. slst
Clr. sd'd m.g. ss - NO shows.

2600

2700 Jan

Je

2800

2830 TOTAL DEPTH

2900

3000

DIVISION OF OIL, GAS AND MINING

PLUGGING PROGRAM

NAME OF COMPANY: N.P. Energy Corporation (Sharel Bateman)

WELL NAME: Federal #30-2

SECTION 30 NE NW TOWNSHIP 20S RANGE 22E COUNTY Grand

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

TOTAL DEPTH: 2830'

CASING PROGRAM:

8 5/8" @ 211' cement to surf

4½" @ 2016'

7 7/8" openhole TD

PBD 2053' (see inplace)

FORMATION TOPS:

Mancos	845'	
Oil & Gas Show	1640' - 1840'	
Dakota	2020'	
Cedar Mtn	2120'	
Morrison	2190'	
Salt Wash	2420'	
Curtis	2710'	
Entrada	2780'	(H_2O)

PLUGS SET AS FOLLOWS:

In place:

1. 2830' - 2680' 50 sx
2. 2550 ' - 2400' 50 sx
3. 2230' - 2053' 50 sx

Set:

1. 2050' - 1750' 20 sx
2. 260' - 160' 30 sx
3. 50' to surface 10 sx

DATE September 2, 1980 SIGNED M. J. Minder

cc: USGS

NP ENERGY CORPORATION

RECEIVED

NOV 19 1984

DIVISION OF OIL
GAS & MINING

November 15, 1984

Utah Natural Resources
Oil, Gas & Mining
4241 State Office Building
Salt Lake City, Ut 84114

Attention: Ms. Vicki Carne

Re: Federal 19-3 20S 22E 19
Federal 30-2 20S 22E 30
Grand County, Utah

Dear Vicki:

This is in response to your telephone request for P & A Sundry notices on the Federal 19-3 and Federal 30-2 wells. I was mistaken in listing Federal 19-3 as P&A'd. This well is currently shut-in. However, the 30-2 really was plugged and I have enclosed the Sundry Notice. Let me know if you need anymore information.

Sincerely,

Rhonda Ahmad

Rhonda Ahmad

RA:cag

Enclosures

NOTE - CAN YOU GIVE US A PA DATE FOR THIS WELL 7-21-87 9-3-87

11340 WEST OLYMPIC BLVD., SUITE 175 LOS ANGELES, CA 90064 (213) 477-5504

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.

5. LEASE DESIGNATION AND SERIAL NO.
U-12702

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

RECEIVED
NOV 19 1984
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 "APPLICATION FOR PERMIT—" for such proposals.)

7. UNIT AGREEMENT NAME

1. OIL WELL [X] GAS WELL [ ] OTHER

2. NAME OF OPERATOR
N P ENERGY CORPORATION

8. FARM OR LEASE NAME
FEDERAL

3. ADDRESS OF OPERATOR
STE. 320, 57 W. SO TEMPLE, SALT LAKE CITY, UTAH

9. WELL NO.
FED. #30-2

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
NW. NE. SECTION 30, T 20S, R 22E., SLM.
632' fr. N-line and 1927' fr. E-line

10. FIELD AND POOL, OR WILDCAT
CISCO DOME

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
NW.NE. Sec. 30-20S-22E. SLM

14. PERMIT NO.

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

12. COUNTY OR PARISH: GRAND

13. STATE: UTAH

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

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	[ ]	PULL OR ALTER CASING	[ ]	WATER SHUT-OFF	[ ]	REPAIRING WELL	[ ]
FRACTURE TREAT	[ ]	MULTIPLE COMPLETE	[ ]	FRACTURE TREATMENT	[ ]	ALTERING CASING	[ ]
SHOOT OR ACIDIZE	[ ]	ABANDON*	[X]	SHOOTING OR ACIDIZING	[ ]	ABANDONMENT*	[X]
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.)*

After repeated unsuccessful attempts to complete the above designated well for commercial production, it has been decided to plug and abandon the well. The casing (4½") was pulled and the well has been plugged and abandoned in the following manner:

Plug #1: Cemented with 40 sks, was placed at 2050' to 1640'. The hole was then filled with mud and,

Plug #2: Cemented with 30 sks, was placed at 260' to 160', which is across the bottom of the surface casing.

Well marker was cemented with 10 sks and placed in the top of the casing.

The clean-up work and rehabilitation work, as prescribed by the application notice, will be accomplished as soon as possible.

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

SIGNED H. Don Quigley TITLE VICE-PRESIDENT DATE SEPT. 3, 1980

(This space for Federal or State office use)

APPROVED BY [signature] TITLE FOR E W GUYNN DATE SEP 8 1980
CONDITIONS OF APPROVAL, IF ANY:

Accepted
~~APPROVED~~ BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
DATE: 11/20/84
BY: John R. Baza

Opa.

*See Instructions on Reverse Side