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

5. LEASE DESIGNATION AND SERIAL NO.: U-11520

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Federal - Anschutz

9. WELL NO.: Calf Canyon #3

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: SE.NW.Sec.3-20S-21E S.L.M.

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: Willard Pease Oil & Gas Co.

3. ADDRESS OF OPERATOR: 570 Kennecott Bldg., Salt Lake City, Utah 84111

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: SE.NW.Sec.3, T.20 S., R.21 E., S.L.M.
At proposed prod. zone: 1766' from W-line & 3020' from S-line

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: Approx.16 miles NW. of Cisco, Utah

12. COUNTY OR PARISH: Grand

13. STATE: Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 1766'

16. NO. OF ACRES IN LEASE: 354.50 ac.

17. NO. OF ACRES ASSIGNED TO THIS WELL: 80.00 ac.

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: 2000'

19. PROPOSED DEPTH: 3800'

20. ROTARY OR CABLE TOOLS: Rotary tools

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 5858' grd.; 5888' K.B.

22. APPROX. DATE WORK WILL START*: ~~June~~ Sept 15, 1977

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
11"	7-5/8"	24.00#	250'	110 sks circulated to sur.
6-3/4"	4½	10.50#	to production	Cemented 200' above Dakota

It is planned to drill a well at the above location to test the oil and/or gas potential of the Dakota, Cedar Mountain, and Morrison formations.(The Entrada will be tested if there is no good production prior.) The well will be drilled 50 ft. below the top of the Entrada unless good and sizable production is ob- at a lesser depth. Mancos formation is at the surface and well will be spudded in the Mancos. The top of the Dakota is expected at 3050'; the Cedar Mountain at 3170'; the Morrison at 3225'; the Summerville at 3675'; and the Entrada at 3725'. The well will be drilled with rotary tools using air for circulation. In the event excessive gas, oil or water is encountered, it may become necessary to convert to mud. The surface casing will be set and cemented with returns to the surface. A blowout preventer(hydraulic plus manual back-up) will be installed on top of the casing head and a rotating head on top of the B.O.P. These will be tested to 2000# for leaks initially. Fill & kill lines (2") will be connected to the casing head below the B.O.P. rams.In the event of production

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. 4½", 10.50#, casing will be run thru the production zone and ce-

24. mented with sufficient cement to bring the cement top about 200' above the Kd.

SIGNED: H. Don Quigley TITLE: Cons. Geol. DATE: Aug.23, 1977

(This space for Federal or State office use)

PERMIT NO.: APPROVAL DATE:

APPROVED BY: W P Martens TITLE: ACTING DISTRICT ENGINEER DATE: NOV 06 1977

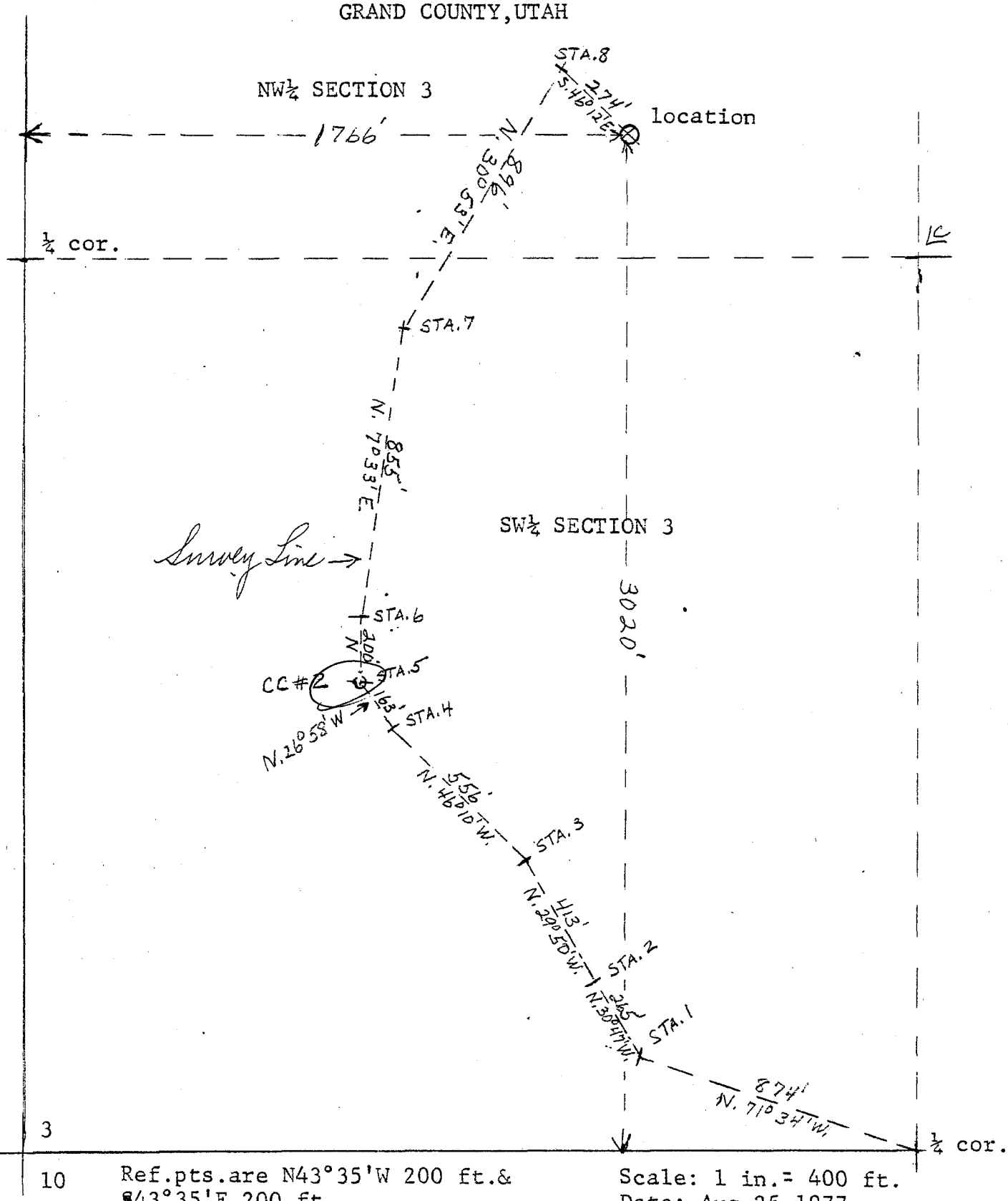
CONDITIONS OF APPROVAL, IF ANY:

NOTICE OF APPROVAL Utah Div. of Oil, Gas & Mining

*See Instructions On Reverse Side

RECEIVED NOV 8 1977 DIVISION OF OIL, GAS, & MINING

LOCATION PLAT FOR
WILLARD PEASE OIL & GAS COMPANY
CC #3 WELL
SE.NW.SEC.3-20S-21E-SLM
GRAND COUNTY,UTAH



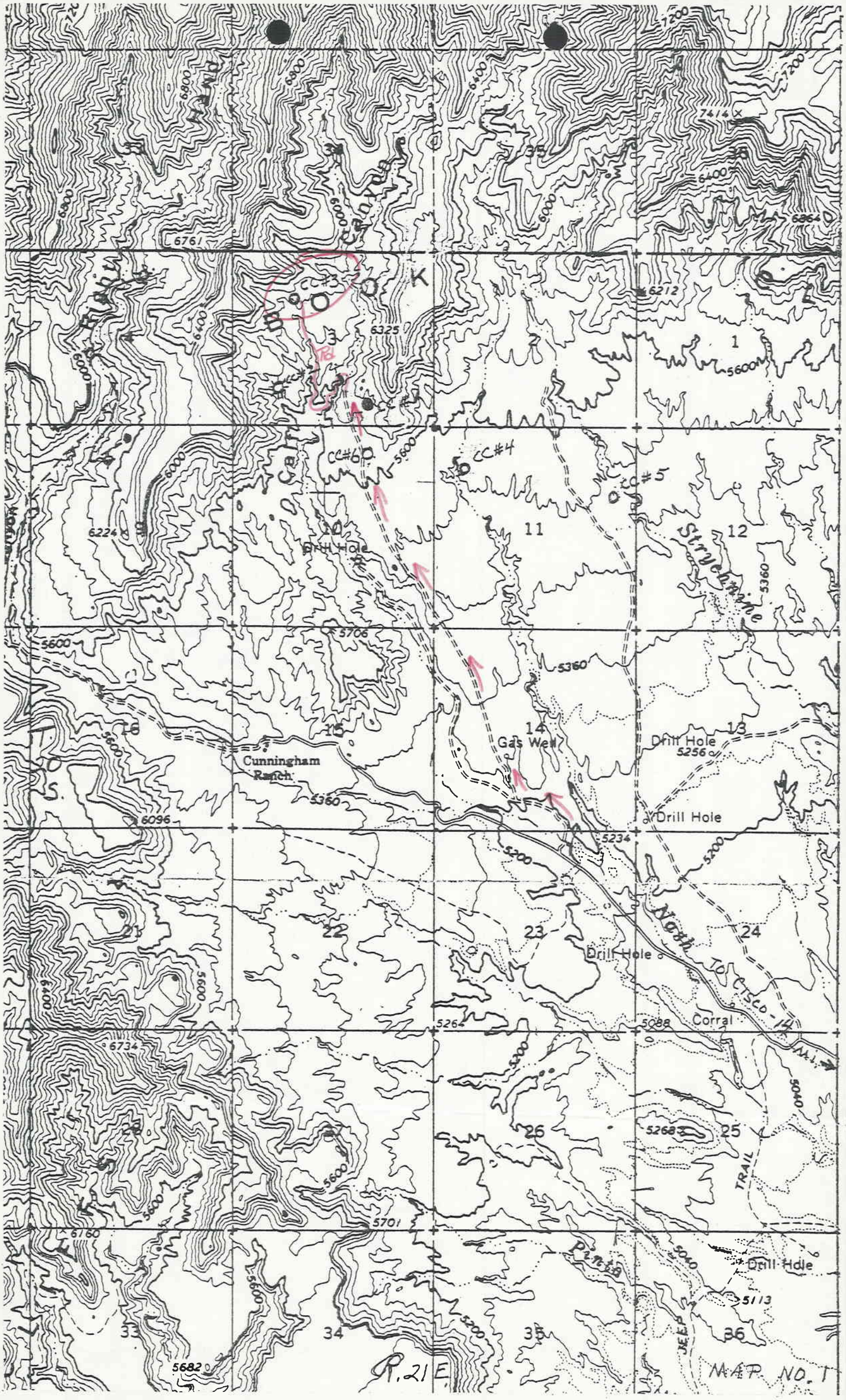
Ref.pts.are N43°35'W 200 ft.&
S43°35'E 200 ft.

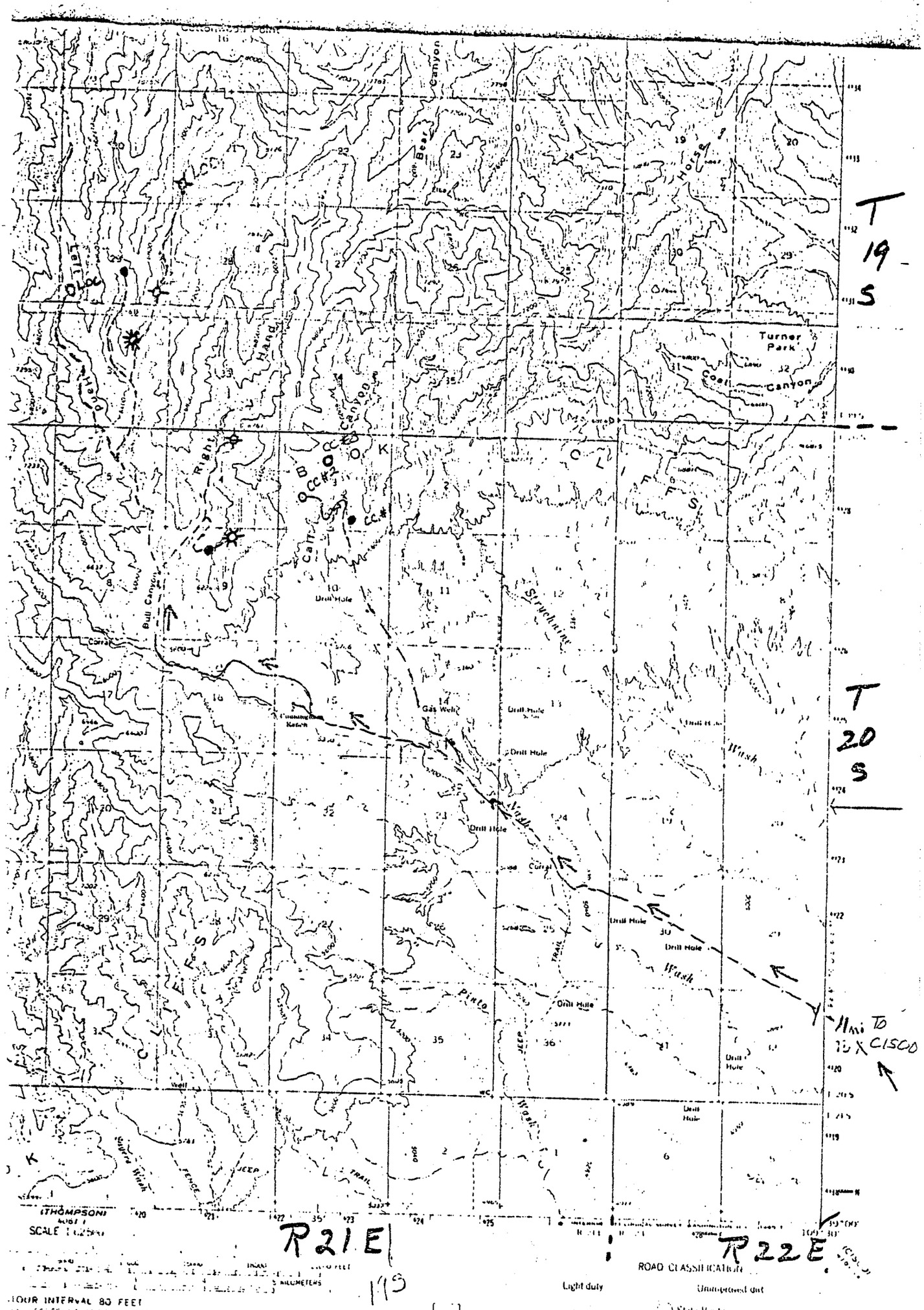
I, W. Don Quigley, certify that this plat was plotted from notes of a field survey made by me on July 24, 1977.

W. Don Quigley

Scale: 1 in.= 400 ft.
Date: Aug.25,1977
Surveyed by: W. Don Quigley

PLAT NO. 1


CC#3
CC#6
CC#4
CC#5
Drill Hole
Gas Well
Cunningham Ranch
Corral
North
Stryker Ranch
Pinto
JEEP TRAIL
TO CTSCD - 14 MI.
MAP NO. 1
R. 21 E.
T. 20 S.


T 19 S
T 20 S
R 21 E
R 22 E
Turner Park
Coal Canyon
Bear Canyon
Horse
Hand
Right
Bull Canyon
Strychnine
Wash
Drill Hole
Gas Well
Pinto
Trail
Jeep
Fence
11 mi TO TO X CISCO
(THOMPSON)
SCALE 1:25000
ROAD CLASSIFICATION
Light duty
Unimproved dirt
State Route
UTAH
MAP NO. 1
SEGO CANYON, UTAH

SURFACE USE AND OPERATIONS PLAN
FOR
WILLARD PEASE OIL & GAS CO.
ANSCHUTZ CC.#3 WELL
SE.NW.SEC.3-20S-21E
GRAND COUNTY, UTAH

1. Location and Lease: A survey plat showing the exact loction of the well site is attached. See Plat No.1. The location is on a gently sloping plateau about 3000' NW. of the Calf Canyon #1 well. The location is on the west side of Calf Canyon in fairly rugged topography. The well is on a federal lease, U-11620, and will be the second well drilled on this lease.

2. Access Road: The access road is an extension to the Calf Canyon road to the CC#1 well. This road is extended down into the wash and then follows the wash southward for ½ mile and then swings westward to the base of the plateau. Here the road will have to climb gradually to get up onto the plateau. The grade will be kept below 10 degrees, if possible. The plateau is gently sloping to the southeast and once the road is on top, there will no cuts or grades to the location. The washes are all dry now and no culverts or deep fills will be required until wet weather and after it is determined whether or not the well is productive. The access road will be about 1/4 mile long and will take a fair amount of cat work to build.

3. Location of Existing Wells: See attached maps. The proposed well is about 3000' northwest of the CC #1 well.

4. Location of Production Equipment: A plan for the anticipated production equipment, if the well is successful, is submitted on Plat No.2. When production ceases this equipment will be removed and the land surface graded, levelled, and reseeded. In the event the production is oil, it may be advisable to run a pipeline to the tank battery at the CC #1 well rather than have to haul the oil down off the plateau. This will be decided later.

5. Water Supply: Water for rig use and drilling operations will be obtained from Nash wash at a water hole built by the State Road Commission and hauled to the location by truck. This will be a distance of about ten miles.

6. Road Material: No additional road material, gravel, or culverts will be required for the time being.

7. Waste Disposal: A reserve pit(unlined) and a burn pit will be constructed at the well site as shown on Plat No. 3. All excess water, mud and drill cuttings will be deposited into the reserve pit. Burnable material and garbage will be put into the burn pit which will be fenced with chicken wire to prevent spreading of debris by the wind.

8. Camp Facilities: and Airstrips: No camp facilities other than two or three house trailers at the well site will be needed. No airstrips will be required.

9. Well Site Plan: A plan for the drilling equipment layout required for the drilling operations is submitted on Plat No.3. The approximate dimensions of the drill site are shown. The site will be levelled for this equipment and the pits dug as shown. The reserve pit will have 4-ft.banks and will be made from the dozed material from the pit. The pit will be unlined.

10. Restoration: After drilling operations have been completed and the equipment removed, the well site will be cleaned, levelled, and restored to normal. The pits will be covered and the area r reseeded, if the well is not successful. Otherwise, the site will be levelled and prepared for the placement of the production equipment. This work will be accomplished within 30 days after the drilling equipment has been removed.

11. Land Description: The proposed well site is on a plateau or mesa on the west side of Calf Canyon. The area is quite rugged and is cut by numerous canyons and washes. Suitable locations for well sites are limited. Access routes are circuitous and sometimes steep. The surface of the well site has sage brush and grass with some small juniper and cedar trees on the edges. No big cuts or fills will be required in the preparation of the site. The surface is gravel and debris from Mancos and Mesaverde cliffs, and the plateau is composed of sands and shales of the Mancos formation.

12. Representative: The operator's representative at the well site will probably be W. Don Quigley. The location and road work will probably be done by company equipment of Willard Pease Drilling Company and by its personnel.

13. Certification:

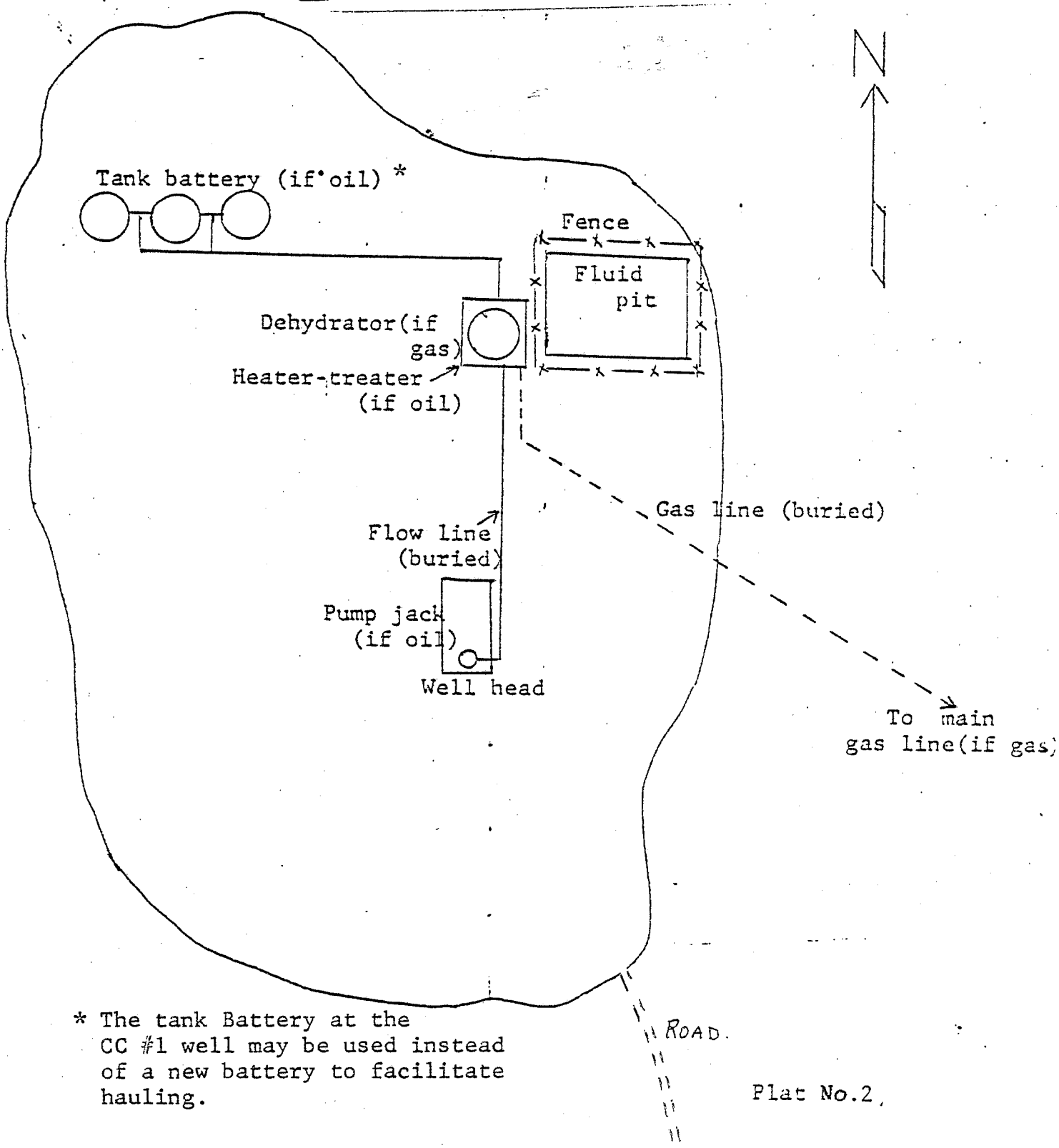
I hereby certify that I, or persons under my direction have inspected the drill site and access route; that I am familiar with the conditions which presently exist; that statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed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

Date: Aug 23, 1977

W. Don Quigley

W. Don Quigley

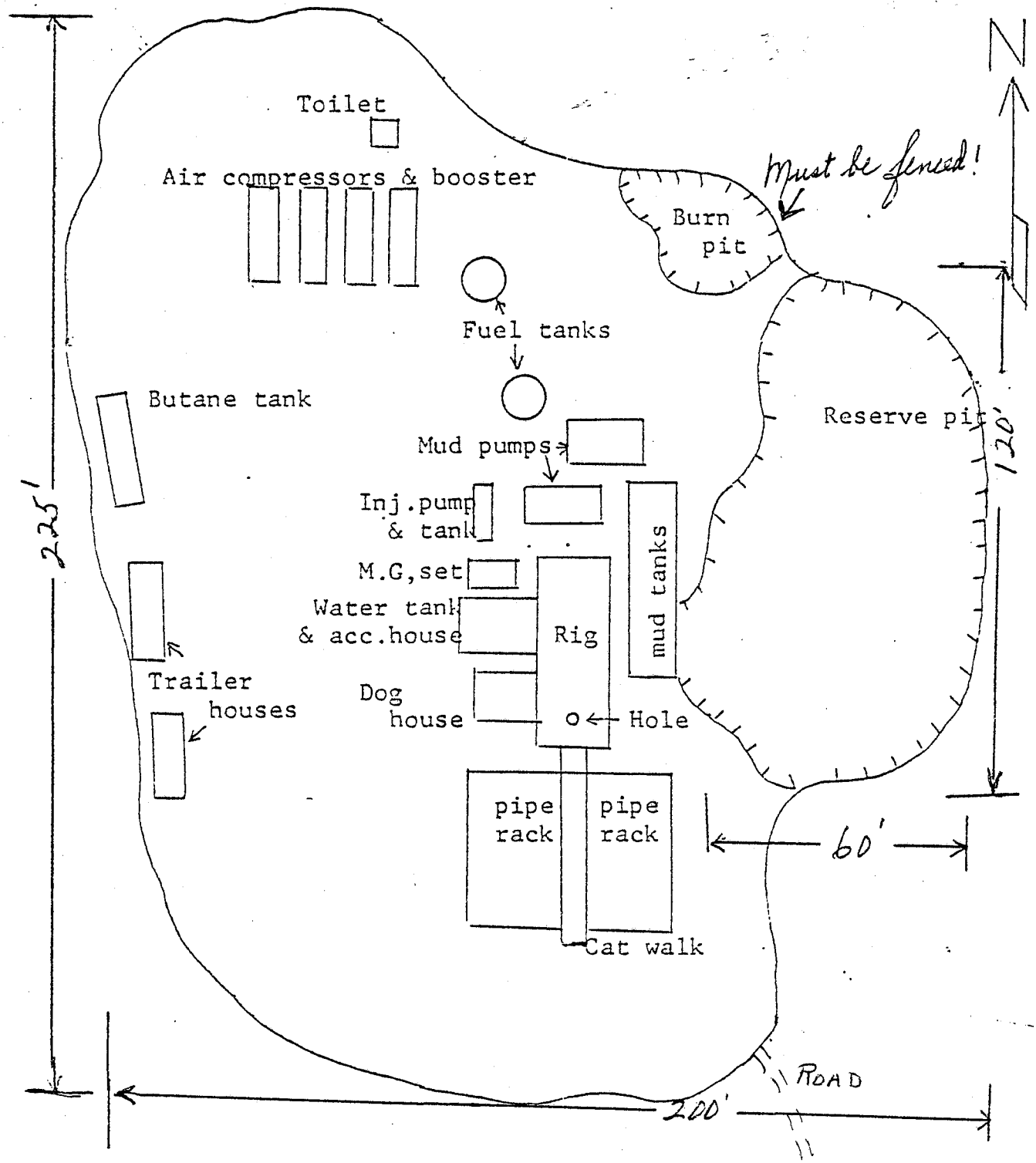
PLAN FOR PRODUCTION EQUIPMENT
WILLARD PEASE OIL & GAS CO.
ANSCHUTZ CC #3 WELL
SE.NW.SEC.3-20S-21E
GRAND COUNTY, UTAH



* The tank Battery at the CC #1 well may be used instead of a new battery to facilitate hauling.

Plat No.2

LOCATION PLAN FOR
WILLARD PEASE OIL & GAS CO.
ANSCHUTZ CC #3 WELL
SE.NW.SEC.3-20S-21E
GRAND COUNTY, UTAH



Scale: 1 in.= approx 35 ft.

PLAT NO.3

WELL CONTROL EQUIPMENT FOR
WILLARD PEASE OIL & GAS CO.
ANSCHUTZ FED. CC # 3
GRAND COUNTY, UTAH

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

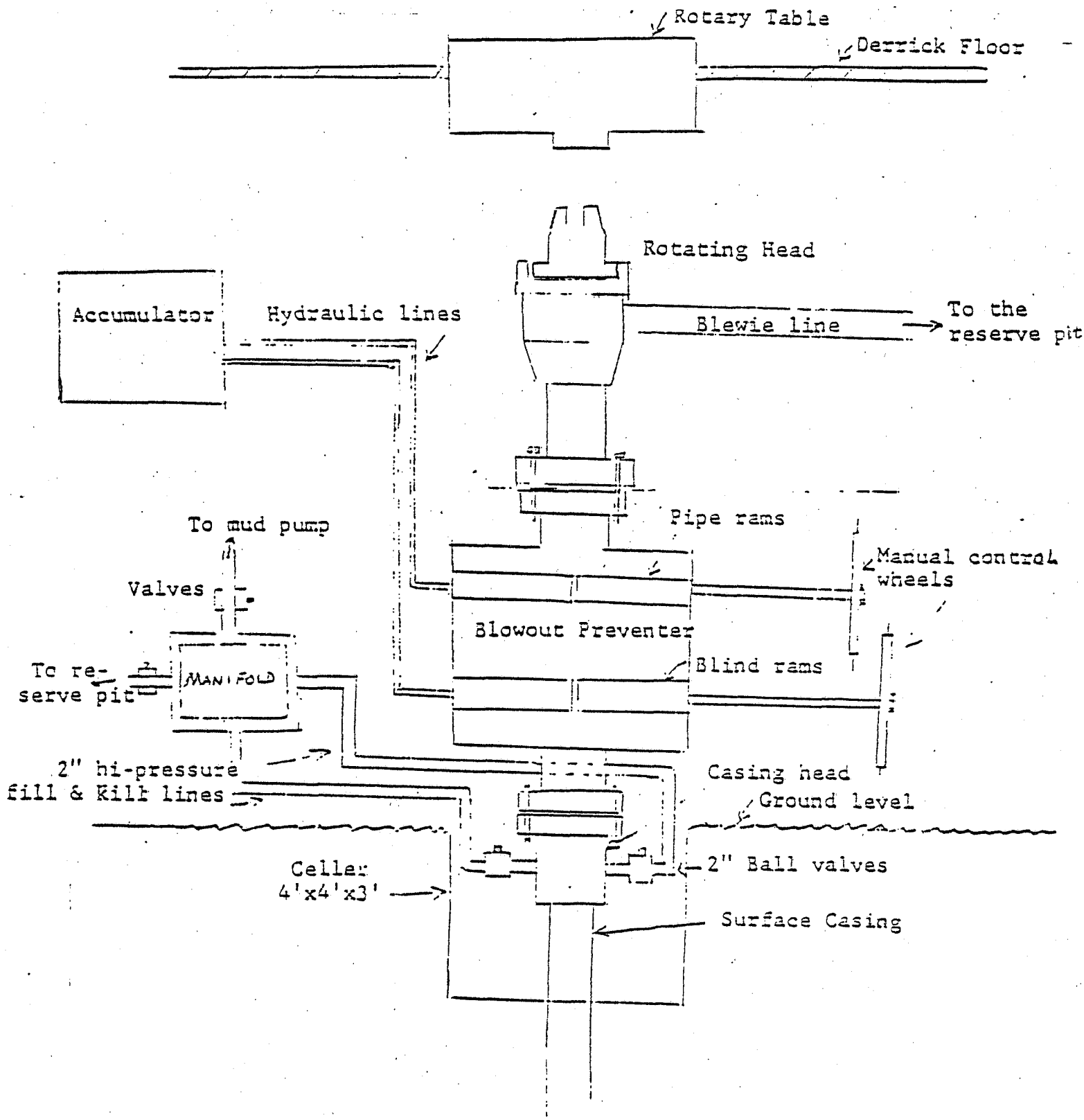
1. Surface Casing:
   A. Hole size for surface casing is 11".
   B. Setting depth for surface casing is approx. 250 ft.
   C. Casing specs. are: 7 5/8" D.D., J-55, 26.40#, 8 rd. thread, new or used.
   D. Anticipated pressure at setting depth is approx.60 lbs.
   E. Casing will be run using three centralizers and a guide shoe, and will be cemented with 110 sks of cement with returns to the surface.
   F. Top of the casing will be at 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.
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.
   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.
   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.
5. Auxillary Equipment:
   A float valve is to be used in the bottom drill collar at all times. A string float will also be used in the drill pipe and kept within 200'-300' of the surface.
6. Anticipated Pressures:
   The shut-in pressures of the Dakota, Cedar Mountain, and Morrison formations at depths of 3000' to 4000' in the area have been measured at about 1000# to 1500# maximum.
7. Drilling fluids:
   Air-soap- water mist will be used to drill the subject well. 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 6 3/4".
   B. Approx. setting depth will be about 3800'
   C. Casing Specs. are: 5½"O.D.; J-55; 15.50#; 8-rd thread; new or used.
   D. Casing will be run with about six centalizers and a Lynes packer and DV tool set above the production zone. There will be sufficient casing to extend thru the production zone below the Lynes packer and 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 packer. Two inch tubing will be run and secured in the tubing head prior to perforating. Pump and rods can be run after the well is swabbed-in.

   An alternate completion plan would be to set the 4½" casing thru the pay section and cement with sufficient cement to bring the cement top about 200' above the top of the Dakota formation. The well would then be perforated in the productive zones, broken down, and fracture-treated, if required.

SCHEMATIC DIAGRAM
OF
CONTROL EQUIPMENT
FOR
WILLARD PEASE OIL & GAS CO.
ANSCHUTZ CC #3 WELL
GRAND COUNTY, UTAH



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

W. DON QUIGLEY

CONSULTING GEOLOGIST
PETROLEUM - MINING WORK

~~323 NEWHOUSE BLDG.~~ - SALT LAKE CITY, UTAH 84101

Suite 440 - 57 W. South Temple

August 25, 1977

Mr. Cleon Feight
Oil & Gas Division
Dept. of Natural Resources
1588 West N. Temple
Salt Lake City, Utah 84116

Dear Sir:

It is hereby requested that an exception to Rule C-3 be granted in the location of the enclosed proposed well site. The location is in a very rugged area with deep canyons and high cliffs. Locations are limited to sloping plateaus and in the canyon bottoms. Therefore a topographic exception is requested.

This lease and farmout arrangement between The Anschutz Corp. & Willard Pease Oil & Gas Company covers all of Section 3, so that there will be no conflict of interest or infringement on adjacent correlative rights.

Sincerely yours,

W. Don Quigley

W. Don Quigley

RECEIVED
AUG 26 1977
DIVISION OF OIL, GAS, & MINING

STATE OF UTAH
DIVISION OF OIL, GAS, AND MINING

** FILE NOTATIONS **

Date: Aug. 29 -

Operator: Willard Pease Oil & Gas

Well No: Calf Canyon #3

Location: Sec. 3 T. 20S R. 21E County: Grand

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

Card Indexed [ ] Completion Sheet [ ]

CHECKED BY: 43-019-30406

Administrative Assistant

Remarks: OK Outside spaced area 2000' from CC#2 - P/gw

Petroleum Engineer

Remarks: OK Pat CC #2 will not produce gas or oil attached letter.

Director

Remarks:

INCLUDE WITHIN APPROVAL LETTER:

Bond Required [ ] Survey Plat Required [ ]

Order No. [ ] Surface Casing Change to [ ]

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

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

Other:

Will not complete as gw in same interval as CC#2.

[ ] ~~Letter written/Approved~~ Disapproved Approved 11-18, w/stipulations

ATTACHMENT 2-A

SUMMARY OF ENVIRONMENTAL IMPACT EVALUATION

EIA NO. 687

DATE 10/5/77

OPERATOR Willard Rose.
LEASE # U-11620
WELL NO. CC #3
LOC. SE ¼ NW SEC. 3
T. 20S R. 21E
COUNTY Grand STATE Utah.
FIELD Wildcat
USGS Wilson
BLM Curnutt
REP: D. Quigley
DIRT ✓

[O] ENHANCES
[ ] NO IMPACT
[/] MINOR IMPACT
[X] MAJOR IMPACT

		Construction				Pollution				Drilling Production						Transport Operations			Accidents		Others
		Roads, bridges, airports	Transmission lines, pipelines	Dams & impoundments	Others (pump stations, compressor stations, etc.)	Burning, noise, junk disposal	Liquid effluent discharge	Subsurface disposal	Others (toxic gases, noxious gas, etc.)	Well drilling	Fluid removal (Prod. wells, facilities)	Secondary Recovery	Noise or obstruction of scenic views	Mineral processing (ext. facilities)	Others	Trucks	Pipelines	Others	Spills and leaks	Operational failure	
Land Use	Forestry ✓	/		/		/				/						/			/	/	
	Grazing ✓	/		/		/				/						/			/	/	
	Wilderness NA																				
	Agriculture NA																				
	Residential-Commercial NA																				
	Mineral Extraction NA																				
	Recreation /	/		/		/				/						/			/	/	
	Scenic Views /	/		/		/				/						/			/	/	
	Parks, Reserves, Monuments NA																				
	Historical Sites			None		Known.															
	Unique Physical Feature NA																				
Flora & Fauna	Birds /	/				/				/			/			/			/	/	
	Land Animals /	/		/		/				/			/			/			/	/	
	Fish NA																				
	Endangered Species			None		Known.															
	Trees, Grass, Etc. /	/		/		/				/						/			/	/	
Phy. Charact.	Surface Water NA																				
	Underground Water ?																		?	?	
	Air Quality /	/																			
	Erosion /	/		/		/				/						/			/	/	
	Other																				
	Effect On Local Economy /	0								0						0					
	Safety & Health /	/		/		/				/						/			/	/	

Others: Our Fee Pit Plot Plan attached with APD showing production Bm Mesh Rec Rev Equip lay-out --- if they hit it big. Dam Wtr
* Reserve pit must be lined

EIA NO. 687

LEASE U-71670 DATE 10/5/77

WELL NO. CC #3

LOCATION: SE ¼ NW ¼, SEC. 3 T. 20S R. 21E

FIELD Wildcat COUNTY Grand STATE Utah

ENVIRONMENTAL IMPACT ANALYSIS - ATTACHMENT 2-B

I. PROPOSED ACTION

Willard Pease Oil & Gas Co (COMPANY) PROPOSES TO DRILL AN OIL AND GAS TEST WELL WITH ROTARY TOOLS TO ABOUT 3800 FT. TD. 2) TO CONSTRUCT A DRILL PAD 225 FT. X 200 FT. AND A RESERVE PIT 70 FT. X 120 FT. 3) TO CONSTRUCT 16/18 FT. WIDE X 0.5 MILES ACCESS ROAD AND ~~UPGRADE~~ Cut 18' FT. WIDE X 0.25 MILES ACCESS ROAD FROM AN EXISTING AND IMPROVED ROAD, TO CONSTRUCT

[X] GAS [ ] OIL PRODUCTION FACILITIES ON THE DISTURBED AREA FOR THE DRILL PAD AND [ ] TRUCK [X] TRANSPORT THE PRODUCTION ~~THROUGH A PIPELINE TO A TIE-IN IN SECTION~~ _____, T. _____, R. not determined at this time

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

(I) TOPOGRAPHY: [ ] ROLLING HILLS [X] DISSECTED TOPOGRAPHY [ ] DESSERT OR PLAINS [X] STEEP CANYON SIDES [X] NARROW CANYON FLOORS [X] DEEP DRAINAGE IN AREA [ ] SURFACE WATER Mr Quigley uses the dry washes as road beds for access roads, cutting into the hill sides only where necessary - BLM wants to question this practice due to unnecessary erosion.

(2) VEGETATION: [X] SAGEBRUSH [X] PINION-JUNIPER [ ] PINE/FIR [ ] FARMLAND (CULTIVATED) [X] NATIVE GRASSES [ ] OTHER _____

BLM Suggests surface soil stockpiled - to be covered back after well ~~comp~~ completion or/Abandon

(3) WILDLIFE: [X] DEER [ ] ANTELOPE [ ] ELK [ ] BEAR [X] SMALL MAMMAL [X] BIRDS [ ] ENDANGERED SPECIES [ ] OTHER _____

(4) LAND USE: [X] RECREATION [X] LIVESTOCK GRAZING [ ] AGRICULTURE [ ] MINING [ ] INDUSTRIAL [ ] RESIDENTIAL [X] OIL & GAS OPERATIONS

REF: BLM UMBRELLA EAR Grand Resource Area (8/13/1975)
~~USFS EAR~~
~~OTHER ENVIRONMENTAL ANALYSIS~~

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

1) EXHAUST EMISSIONS FROM THE DRILLING RIG POWER UNITS AND SUPPORT TRAFFIC ENGINES WOULD ADD MINOR POLLUTION TO THE ATMOSPHERE IN THE LOCAL VICINITY.

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

3) MINOR VISUAL IMPACTS FOR A SHORT TERM DUE TO OPERATIONAL EQUIPMENT AND SURFACE DISTURBANCE.

4) TEMPORARY DISTURBANCE OF WILDLIFE AND LIVESTOCK.

5) MINOR DISTRACTION FROM AESTHETICS FOR SHORT TERM.

6)

4. Alternatives to the Proposed Action

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

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

3) LOCATION WAS MOVED _____ TO AVOID _____

☐ LARGE SIDEHILL CUTS ☐ NATURAL DRAINAGE ☐ OTHER _____

Note 4) As a suggestion it was agreed that the reserve pit in this site be lined. - There is a chance (good) of hitting quantities of water. - Since Air drilling - they should be able to control ?? (over)

5. Adverse Environmental Effects Which Cannot Be Avoided

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

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

3) MINOR AND TEMPORARY DISTURBANCE OF WILDLIFE.

4) TEMPORARY DISTURBANCE OF LIVESTOCK.

5) MINOR AND SHORT-TERM VISUAL IMPACTS.

6)

6. DETERMINATION:

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

DATE INSPECTED 10/5/77

INSPECTOR James E. Wilson

E. W. Guynn

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

U. S. GEOLOGICAL SURVEY
CONSERVATION DIVISION

_____ District Notified
_____ Mailed to D.E.

To: District Engineer, _____

NID

Operator	Well	Location
Willard Pease O+G Co	Fed. Anschutz Calf Canyon #3	Grand Co., Utah SENW Sec 3 T. 20S, R. 21E

Lease No.	Ground elev.	Objective	Surface casing	Estimated T. D.
U11620	5858	O+G - Dakota, Cedar Mtn, Morrison	7 5/8 to 250'	3800

Formation	Possible resource	Estimated depth	Estimated thickness	Remarks *
Mancos	-	Surface	3050	probably no significant useable water
Dakota	O+G	3050	120	
Cedar Mtn	O+G	3170	55	
Morrison	O+G	3225	450	
Summerville		3675	50	
Entrada	Oil	3725		
TD		3800		

Competency of beds at proposed casing setting points: ok

Additional logs or samples needed: none

* Where applicable note:
1. Potential oil and gas productive zones
2. Zones bearing fresh water
3. Possible lost circulation zones
4. Zones with abnormal pressure
5. Zones with abnormal temperature
6. Other minerals such as coal, oil shale, potash, etc.

Signed: [signature]
Geologist

Date: 9/7/77

State Oil and Gas

September 7, 1977

Willard Pease Oil & Gas Co.
570 Kennecott Building
Salt Lake City, Utah 84111

Re: Well No. Calf Canyon #3
Sec. 3, T. 20 S, R. 21 E,
Grand County, Utah

Gentlemen:

This Division is unable to administratively approve the drilling of the above referred to well without a hearing before the Board of Oil, Gas, and Mining.

As said well is to be located outside of the area covered by the Board's Order in Cause No. 102-12, it falls under the provisions of Rule C-3, General Rules and Regulations and Rules of Practice and Procedure, which provides that there must be 4,960' between gas wells.

Consequently, as your proposed well site is to be located at a distance of approximately 2000' from an existing gas well (CC#2), it will be necessary that you receive Board approval for the site; either in the form of an exception to Rule C-3 or an extension of the provisions of the Order issued in Cause No. 102-12.

Should you have any questions relative to the above, please do not hesitate to call myself or Mr. Patrick L. Driscoll, Chief Petroleum Engineer.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

CLEON B. FEIGHT
Director

cc: U.S. Geological Survey

November 14, 1977

Mr. Willard Pease
570 Kennecott Bldg.
Salt Lake City, Utah 84111

Re: Well No. Federal Anschutz CC#3
Sec. 3, T. 20 S, R. 21 E,
Grand County, Utah

Gentlemen:

This is to remind you that the State of Utah has previously denied this application for a drilling site located in the SENW of Section 3, Township 20 South, Range 21 East.

Any attempt to pursue the drilling of this well without further obtaining the approval of the State of Utah as per our letter of September 7, 1977; will result in this Division requesting legal action from the office of the Attorney General.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

CLEON B. FEIGHT
Director

cc: U.S. Geological Survey

WILLIAM R. PEASE
OIL AND GAS Co.
570 Kennecott Building, Salt Lake City, Utah 84133, (801) 364-6217

CIRCULATE TO:
DIRECTOR
PETROLEUM ENGINEER
MINE COORDINATOR
ADMINISTRATIVE ASSISTANT
ALL
RETURN TO FOR FILING

November 15, 1977

RECEIVED
NOV 16 1977
DIVISION OF OIL, GAS, & MINING

Mr. Cleon B. Feight
Director
Utah Division of Oil, Gas
and Mining
1588 West North Temple
Salt Lake City, Utah 84116

Re: Well No. Anschutz Federal CC#3
Sec 3, T20S, R21E
Grand County, Utah

Dear Mr. Feight:

Pursuant to my telephone conversation with Mr. Pat Driscoll on this date, please be advised that testing of the Pease Oil and Gas Company's Anschutz CC #2 does not indicate commercial gas possibilities from the Dakota formation. Furthermore, we do advise that no further attempts will be made to produce gas from the interval 3011-15' (Dakota Formation) in the Anschutz Federal CC #2 well bore.

It is therefore requested that you reconsider our Application to Drill the above referenced well. Please advise should additional data be necessary.

Yours very truly,

J. R. Curtsinger

J. R. Curtsinger

lr

cc: U. S. Geological Survey
Department of the Interior

November 18, 1977

Willard Pease Oil & Gas
570 Kennecott Building
SAlt Lake City, Utah 84133

Re: WELL NO. Anschutz Fed. CC#3
Sec. 3, T. 20 S, R. 21 E,
Grand County, Utah

Gentlemen:

Insofar as this office is concerned, approval to drill the above referred to well is hereby granted in accordance with Rule C-3, General Rules and Regulations and Rules of Practice and Procedure. However, said approval shall be contingent upon no attempt being made to produce gas from the interval 3011'-3015' (Dakota Formation) as in the Anschutz Federal CC#2 well.

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

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

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

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

The API number assigned to this well is 43-019-30402.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

CLEON B. FEIGHT
Director

cc: U.S. Geological Survey

DRC

January 13, 1978

Memo To File:

Re: PLUGGING PROGRAM,
Willard Pease Oil & Gas
C C #3
Sec. 3, T. 20S, R. 21E,
Grand County, Utah

The following is the plugging program approved by Patrick L. Driscoll on December 30, 1977.

TOTAL DEPTH: 3950' 7 7/8's surface 167'
with 175 sacks, returns to surface

TOPS:
Morrison 3200'
Salt Wash 3500'
Entrada 3900'

PLUGS:
3950'-3850' 35 sx
3550'-3450' 35 sx
3150'-3000' 40 sx
170'- 120' 25 sx

Plug at top and marker.

PATRICK L. DRISCOLL
CHIEF PETROLEUM ENGINEER

DRILLING HISTORY

AND

GEOLOGIC REPORT

ON

WILLARD PEASE OIL & GAS CO.

CALF CANYON #3 WELL

GRAND COUNTY, UTAH

By

W. Don Quigley

Consultant
Salt Lake City, Utah

February 10, 1978

DRILLING HISTORY
AND
GEOLOGIC REPORT
ON
WILLARD PEASE OIL & GAS CO.
CC #3 WELL

Operator: Willard Pease Oil & Gas Co.
570 Kennecott Bldg., Salt Lake City, Utah 84111

Contractor: Willard Pease Drlg. Co.- Rig 2
P.O. Box 548, Grand Junction, Colo. 81501

Location: SE. NW. Sec. 3 - T 20S., R 21E., SLM.
Grand County, Utah (1766' fr W-line and 3020' fr S-line).

Elevation: 5858' grd; 5868' K.B.

Spudded-in: Dec. 26, 1977

Surface Casing: 8 5/8", 24#, J-55, set at 167' K.B. and cemented w/175 sks cement with returns to surface.

Hole Size: 7 7/8"

Total Depth: 3940'

Finished Drlg: Jan. 2, 1978

Electric Logs: Induction-Electrical log.

Production Zones: None

Bottom Formation: Entrada

Plug & Abandoned: Jan. 2, 1978

Drilling History

Dec. 23-24: Move in rig and rig-up.

Dec. 26: Finished rigging up. Drilled rat hole and mouse hole. Drilled 12¼" surface hole to 167'.

Dec. 27: Ran 4 jts of 8 5/8", 24#, J-55 casing (173'). Set at 167' K.B., and cemented with 175 sks cement. Had returns to the surface. Plug down at 4 A.M. Waiting on cement to set. Nippled up to drill ahead with air. Dried up hole and began drilling ahead with 7 7/8" bit. Drilled to 275'. Survey at 167' was 1°.

Dec. 28: Drilled 275' to 1840' (1565'). Drilling ahead in Mancos shale at rate of 85 ft/hr. Dusting good. Made rd-trip at 1840' for new bit. Bit #2 (Reed-FP-52-RR) drilled 1673' (167' to 1840') in 20½ hrs. Drilled at avg. rate of 83 ft/hr.

Dec. 29: Drilled 1840' to 3230' (1390'). Drilling in Mancos shale to 3100' at rate of 100' per hr. Est. top of Dakota at 3100' - no sands - bentonitic shales and siltstone. Estimate top of Morrison to be at 3200' due to red shale.

Dec. 30: Drilled 3230' to 3853' (623'). Encountered water in top of Salt Wash section at 3450'-60'. Began mist-drilling at 3515'. Made rd-trip at 3853' for new bit. Bit gave up and wouldn't drill any further. Tried to mud-up before coming out of hole but bit plugged with loss-circulation material. Came out of hole wet. Bit #3 (Reed-FP-53-RR) made 2013' (1840' to 3853') in 30 hrs. Drilled at avg rate of 67 ft/hr.

Dec. 31: Mixed mud, circulated and reamed hole to about 3700' and bit gave up, so came out of hole for new bit. Bit #4 (CP-RR) reamed hole from 3100' to 3700'.

Jan. 1: Drilled 3853' to 3891' (38'). Circulated and reamed back to bottom. Got on bottom and began drilling ahead at 6:45 P.M. Bit gave up at 11 P.M. so had to make rd-trip for new bit. Left two cones in hole. Bit #5 (Reed-Y21G) made 38' (3853'-3891') plus reaming in 22 hrs. Worked on swivel from 9:45 A.M. to 2 P.M. Est. top of Entrada at 3890'.

Jan. 2: Drilled 3891' to 3940' (49'). Drilling in Entrada sand. Finished drilling at 10 A.M. Circulated and conditioned hole for 1½ hrs and came out to run logs. Began logging at 4:15 P.M. Ran Dual-Induction log. Bit #5 (Reed-Y21G) made 49' (3891 to 3940') in 3½ hrs. Drilled at avg rate of 14 ft/hr. in Entrada sand. Finished logging at 1600 hrs. Found no favorable looking sands,

so decided to plug well. Called for plugging instructions and permit from U.S.G.S. Plugged well as follows:

Plug No. 1: 3940' to 3840' (35 sks) Top of Entrada
Plug No. 2: 3520' to 3420' (35 sks) Thru Salt Wash
Plug No. 3: 3150' to 3000' (40 sks) Thru Dakota
Plug No. 4: 170' to 120' (25 sks) bottom of casing
Plug No. 5: At surface (10 sks) with well marker

Released rig at midnight.

Jan. 3: Rigging down.

GEOLOGIC REPORT ON CALF CANYON #3 WELL

Introduction

The Calf Canyon #3 well, like the CC #1 and CC #2 wells, is located on the northwest plunging nose of the Cisco Dome Anticline at the base of the Book Cliffs. The well is in the same fault block as the CC #2 well; but is separated from the CC #1 well by a northeast trending fault which is upthrown on the west side.

The well was designed to test the oil and gas production possibilities of lenticular sand reservoirs in the Dakota, Cedar Mountain, and Morrison formations. The well was drilled to a depth of 3940' which was 55 feet below the top of the Entrada formation, and found water in the Entrada. Since no productive lenticular sands were found in the Dakota, Cedar Mountain, or Morrison formations, the well was plugged and abandoned.

The subject well is located about 2000' north of the CC #2 well which had a large number of well developed lenticular sand reservoirs; yet the subject well had only two such sands in the Salt Wash section of the Morrison and both of these contained water.

Both the CC #1 and CC #2 wells, each located about ½ mile from the subject well are producing oil wells from the Dakota formation. The CC #2 well has not been put on production yet; but recent checks on the well indicate that some of the problems

present when operations were suspended may have been corrected with time and the well may now be put on production. Further testing will be required to ascertain this for certain.

Recently three other wells have been drilled in the immediate area and all are potentially productive oil wells from the Dakota formation. One of these wells is ready to be put on pump; the other two are waiting on a completion rig and for the weather to moderate.

Thus the area is quite well established as a producing oil field. The extent of the field will not be determined until several more wells are drilled.

The Calf Canyon #3 well was drilled with air down to a depth of 3515' and was then converted to air-mist with soap and water due to encountering water in the Salt Wash section of the Morrison formation. Air-mist was used for circulation from 3515' to 3853'. The bottom portion of the well (3853' to 3940') was drilled with mud. The well was drilled within a period of six days and only took eight days from rig-up to rig-down.

General Geology

The geologic conditions surrounding the CC #3 are similar to those for the CC #1 and CC #2 wells; and need not be repeated in this report. Briefly, however, the hydrocarbon reservoirs in the area are lenticular sands in the Dakota, Cedar Mountain, and Morrison formations. They vary considerably in size, thickness, and regularity. The sand lenses form their own trapping mechanisms without dependence on structure. However, experience and past drilling have shown that success is more likely and more favorable on and around anticlinal features; primarily because the sand development is better around the anticlines. The size of the reservoirs is problematical and unpredictable. Thus normal parameters used in figuring reserves are misleading. The most reliable parameter is the shut-in pressure of the reservoir. Through experience a relationship between producible reserves and initial reservoir pressure has been established, which permits a fairly close estimation of the recoverable reserves.

In general, the sand lenses trend northeastward in the area, but often have sharp changes in their direction for short distances. They tend to interfinger and thicken and thin rapidly, so drainage patterns are irregular and limited in extent; thus communication between wells on a fairly close spacing pattern (160 acres

for gas and 40 acres for oil) is probably going to be minimal. This was very evident in the CC #3 well which did not have any of the good sands found in the Dakota formation in the CC #2 well.

The area is quite highly faulted, thus dividing the area into numerous fault segments. Frequently adjacent wells will be located on different fault blocks. In general the faults trend northeastward also and tend to destroy the natural porosity and characteristics of the sand reservoirs near the fault zone by the introduction of clay minerals and gouge material. They have effected the hydrocarbon accumulations very little since most of the faults are younger; but they certainly effect the drainage of the reservoirs a great deal.

Because of the potential possibility of having a number of sand lenses in the section, the success ratio is high. Recently seven wells have been drilled in the area and only one, the CC #3, has been dry. There can be as many as eight different sand lenses in the section; thus if one sand is not present, another may be found a few feet deeper.

Stratigraphy and Hydrocarbon Zones

The stratigraphic section encountered in the subject well was quite normal in sequence and thickness but was almost devoid of sands and was abnormal in this respect; and likewise there were no hydrocarbon shows thru the Dakota and Morrison formations which was abnormal.

The Dakota formation contained no sands at all, which was most unusual. There were some siltstones, calcareous shales, and lots of bentonite, but no sands. The formation was about 150 feet thick and had no hydrocarbon shows.

The Morrison formation was topped at 3250' and the upper portion (Brushy Basin) contained no sands. The section was mostly bentonitic shales and siltstone. The Salt Wash portion was encountered at 3458'. The upper sand, 3458' to 3476', was very fine grained, bentonitic, and tight. No hydrocarbon shows were observed. Some water was present since the cuttings were damp. A second sand was found at 3500' to 3520'. This sand was medium-grained, rounded grains, calcareous, and wet. Mist-drilling with air-soap-water had to be commenced at this point because of the water. No hydrocarbon shows were observed in this sand either. The Morrison was about 510' thick in the subject well.

The Curtis-Summerville formation was encountered at 3760 feet, and contained green glauconitic shale, red siltstone, lt. brn. sandy limestone and thin beds of very fine-grained, limy sandstone. The formation was 125' thick in the subject well, which was about 50' thicker than in the CC #2 well. This may indicate that the local area around the CC #3 well was low and receiving more sediments than the surrounding area during deposition of the formation. It has been found in other wells in the region that if this section is thicker than normal, it ususally results in a dry hole. No hydrocarbon shows were observed in this formation.

The Entrada formation was reached at 3885' and about 55 feet were drilled. The Entrada was light tan, medium-grained, rounded grains, loosely consolidated sandstone. No shows of hydrocarbons were present and the sand was obviously wet.

The formations with their tops, thicknesses, and datum points which were encountered in the Calf Canyon #3 well, as determined from the electric log, are as follows:

Formation	Depth to Top	Thickness	Datum
Mancos	Surface	3100'	5868' K.B.
Dakota	3100'	150'	2768'
Morrison (Brushy Basin)	3250'	208'	2618'
(Salt Wash)	3458'	302'	2410'
Curtis-Summerville	3760'	125'	2108'
Entrada	3885'	——	1983'
Total Depth	3940'		

Comparison of the above data with similar data on the CC #2 well reveals that the subject well was about 40 feet lower structurally on the tops of the Dakota, Morrison, and Curtis-Summerville formations; but was about 90 feet lower on the top of the Entrada. The difference was due to the increased thickness of the Curtis-Summerville formation.

A sample log of the cuttings from the well from 2000' to total depth is attached hereto.

Conclusion

The unsuccessful results of the Calf Canyon #3 well were largely due to the complete absence of reservoir sands in the Dakota formation. The position of the well structurally was about 50 feet lower than expected; but this would not have been particularly

detrimental or of concern had the potential sands been present. The lack of sands plus the increased thickness of the Curtis-Summerville formation indicate that during the depositional period the area was low and removed from the aggrading stream deposition of the faster moving waters. Silts, shales, bentonite, and dirty limestones were being deposited instead of sands.

The marked change in the lithology of the sediments found in the subject well as compared to that found in the CC #1 and CC #2 wells is clear evidence as to the irregular nature and discontinuity of the sand reservoirs in the area. Each well is a wildcat; but, even so, the odds are good and the success ratio is high. Only one out of the six wells that have been drilled in the area during the last two years is a dry hole.

W. Don Quigley

W. Don Quigley
Consulting Geologist
A.A.P.G. Cert. #1296
A.P.G.S. Cert. #3038

Drlg. Time — Perse Oil & Gas Co. CC #3 Well

MIN/FT — S[illegible] NW Sec 3-20S-R21E

Elev. 5363' K.B.

0 5 10

2000 — DK. gry TO BLK. SLTY CALC. marine sh.

*BLK. V. CALC. BENT sh. w/ STRONG gas odor.

BLK V. CALC. BENT sh. - good odor

2100

DK. gry. CALC. BENT sh.

2200

2300

LT. gry V. CALC (IMY) BENT. sh.

2400 — DK. gry. CALC. sh. - good odor

LT. gry V. CALC. BENT sh.

2500 — lots of BENT

2600

DK. gry IMY BENT. sh

*BLK. TO dk. brn IMY BENT sh w/ pet. st. & odor.

2700

*BLK. TO dk brn CALC. SLTY sh w/ good odor & st.

2800

DK gry CALC (SL.) SLTY sh

2900

K+E 5 X 5 TO ½ INCH 46 0863 7 X 10 INCHES MADE IN U.S.A. KEUFFEL & ESSER CO.

66 #3 Well Cont 2900' – 3800'

Drlg. Time min/ft

5 10

2900

Dk gry non-calc. anhy. silty sh.

Blk. dns. anhy. silty sh.

3000

Lt. gry silty anhy. cont. sh.

Kd

3100

Lt. gry silty cont. sh.

Lt. gry calc. silty sh & slst. (micac.)

Lt. gry silty cont. sh.

Wh. & calc. cont. sh.

+ slst.

3200

Wh. cont. & calc. slst & sh.

Jm

Calc. slst + sh.

Wh. cont. & slst.

Dk. slty cont. sh.

Calc. slst.

Vari. slty cont. sh.

Gry & cont. slst.

3300

Lt. gry gry & cont. sh.

Lt. gry & gry cont. sh.

Vari. slty & cont. sh.

Gry & cont. slst.

Lt. gry cont. sh.

3400

Vari. slty & cont. sh.

Dk-gry slst.

Lt. gry to wh. cont. sh.

Jmsw

Lt. brn to wh. vfg. calc. ss. – some H2O

Wh. & gry cont. sh.

Gry & cont. sh.

3500

Lt. gry cont. sh.

Lt. gry, gry, vari. slty sh.

Wh. to gry, f-m kg. calc. ss (wet) had to start wash

Blk. gry, and calc. slst + sh.

+ gry cont. sh.

Lt. gry mag. arty & calc. ss. + vari. calc. slst.

Spec. wh-calc. ah. calcs. + vari. slst.

Gry vfg. calc. ss. & mod. arg., gry slst.

3600

Some wh. gry vfg. calc. ss + vari. calc. slst + sh.

Gry. cont. sh & vari. slst.

+ some wh-gry stratic ss.

Blk. carb. sh.

Gry. glauc. slst & sh. & lt. gry sdy slst.

Gry to gry slst. ss & sh. + lt. gry to gry dns.

+ wh-gry stratic ss.

3700'

+ lt. gry xln dns.

*Some lt. gry xln dns. w/ blk. dol. st. – no cut on fluor (cont)

Jcw

As above + vari. calc. sh. & slst. & ss – Rd. slst.

Gry glauc. sh. & slst. gry gry sdy & vfg. calc. ss

Lt. gry, mg. vary ss & lt. brn sdy ss.

+ no slst. + gry sh.

As above + buff clr. friable ss – orange specks

Gry vfg. calc. ss. vari. mod – arg. gry slst.

Rd. gry, lt. gry calc. slst & sh.

3800'

K+E 5 X 5 TO ½ INCH 46 0863
7 X 10 INCHES MADE IN U.S.A.
KEUFFEL & ESSER CO.

CC # 3 Well Cont 3800' –

Min/ft
Drlg Time

3800'

MUD Drlg

Jc 3900

4000'

Rd, Gray, Grn Carb. Sist & Sh
Rd, Sist & Ish
Gra to lt Brn Mg. Hard loose ss.
Gray-Grn Carb. Sh & Sist.
Rd Sist & Brn Arg Ms
Gray, Blk & lt Brn Sist
Lt Tan Loose Med Hard Ms.
Lt Brn loose Mg Hard ss
T.D. 3940'

Utah State

6

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*

RECEIVED MAR 6 1978 DIVISION OF OIL, GAS, & MINING

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: Willard Pease Oil & Gas Company

3. ADDRESS OF OPERATOR: 570 Kennecott Bldg, Salt Lake City, Utah 84111

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface: SE.NW.Sec.3,T20S,R21E,S.L.M.
At top prod. interval reported below
At total depth: 1766'from W-line & 3020'from S-line

5. LEASE DESIGNATION AND SERIAL NO.: U-11620

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Federal-Anschutz

9. WELL NO.: Calf Canyon #3

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: SE.NW.Sec.3-20S-21E S.L.M.

14. PERMIT NO.: 76 | DATE ISSUED:

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

15. DATE SPUDDED: Dec.26,'77 | 16. DATE T.D. REACHED: Jan.2,'78 | 17. DATE COMPL. (*Ready to prod.*): xxxxxxxxx | 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*: 5858'grd.,5868'K.B. | 19. ELEV. CASINGHEAD: xxxxxxx

20. TOTAL DEPTH, MD & TVD: 3940' | 21. PLUG, BACK T.D., MD & TVD: xxxxxxx | 22. IF MULTIPLE COMPL., HOW MANY*: none | 23. INTERVALS DRILLED BY: → | ROTARY TOOLS: 0-3940' | CABLE TOOLS:

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

25. WAS DIRECTIONAL SURVEY MADE: no

26. TYPE ELECTRIC AND OTHER LOGS RUN: Induction-Electrical

27. WAS WELL CORED:

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#	167'	12¼"	175 sks	none

29. LINER RECORD

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

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)

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

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

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

33.* PRODUCTION

DATE FIRST PRODUCTION: None | PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*): none | WELL STATUS (*Producing or shut-in*): P&A

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

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

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

TEST WITNESSED BY

35. LIST OF ATTACHMENTS: Drilling History & Geologic Report plus Sample Log

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

SIGNED: H. Dow Gingley | TITLE: Cons. Geol. | DATE: Feb.20,1978

*(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.
	SEE ATTACHED REPORT.		

38. GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH

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