

FILE NOTATIONS

Entered in NID File
Location Map Pinned
Card Indexed

Checked by Chief
Approval Letter
Disapproval Letter

COMPLETION DATA:

..... OS..... PA. ✓.....

Location Inspected

State or Fee Land

LOGS FILED

Miller's Log. ✓.....

Electric Logs (No.) ✓.....

E..... I..... Dual I Lat..... GR-N..... Micro.....

SNC Sonic GR..... Lat..... Mi-L..... Sonic.....

GRLog..... CCLog..... Others.....



DIVISION OF CONSERVATION ARCHAEOLOGY

San Juan County
Museum Association

March 6, 1979

Robert C. Anderson
c/o A. B. Geren
P.O. Box 1469
Farmington, New Mexico

Dear Sir:

Enclosed is our archaeological clearance survey report for R. C. Anderson #1 gas well pad and access road. The survey was conducted on March 1, 1979, near Bluff, Utah. One archaeological site was located approximately 80 feet west of the western edge of the well pad and approximately 50 feet west of the access road extension. It is recommended in this report that the site be protected from adverse effects due to construction activities and that the construction workers are warned not to disturb the site. Archaeological clearance is recommended for R. C. Anderson #1 with these provisions that construction activities are strictly confined within the proposed locations for the well pad and access road extension.

Also enclosed is our invoice for the survey and report preparation. If there are any questions concerning this report, please do not hesitate to call us.

Sincerely,

Charles M. Haecker
Staff Archaeologist

CMH/ta

Enclosures

cc: Mr. Rocky Curnett, Moab District Manager, BLM
Mr. Bruce Louthan, Regional Archaeologist, BLM
Mr. Phil McGrath, USGS, Farmington
Mr. Richard Fike, State Archaeologist, Utah BLM
Dr. David Madsen, Utah State Archaeologist, Salt Lake City
Mr. Wilson Martin, Utah State Division of History, Antiquities
Section
Mr. Charles McKinney, Department of Interior

**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-24938A (U-942)

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Cottonwood Wash

9. WELL NO.

No. 1-23 Skyline Fed.

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

SESW Sec. 23-39S-21E

12. COUNTY OR PARISH

San Juan

13. STATE

Utah

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.)

1.

OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR

R.C. Anderson Oil Properties

3. ADDRESS OF OPERATOR

1060 Denver Club Bldg., Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)

At surface
674' FSL, 2038' FWL Sec. 23 - 39S-21E
San Juan, County, Utah.

14. PERMIT NO.

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

4590' GR 4603' KB

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>
(Other) <input type="checkbox"/>	

SUBSEQUENT REPORT OF:

WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input checked="" type="checkbox"/>
(Other) <u>Well History</u> <input checked="" type="checkbox"/>	

(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.)* Note: The well started drilling in fine to medium grain silty

orange-red Navajo sandstone. A fresh water flow was encountered at a depth of between 600 to 800' with a rate of approx. 30-40 bbl./hr. and continued to increase with depth to a maximum rate of approx. 60-100 bbl./hr. down to the top of the Chinle at a depth of approx. 1520'. The water flow was shut off when the intermediate string was set at a depth of 1703'. After the 8 5/8" intermediate string was set, a 7 7/8" hole was mud drilled on down to a depth of approx. 5800' with little event. Only minor fluorescence was noted throughout the Paradox section. T.D. was reached at 2:45 P.M. on 7-3-79. On 7-4-79 the following electric logs were run: Induction-SFL, Compensated Neutron-Formation Density, & Borehole Compensated Sonic Log. Formation tops as follows: Navajo ss - Surface, Kayenta - approx. 1100', Chinle - 1520', DeChelly - 2648', Organ Rock - 2745', Hermosa - 4550', Paradox (Upper Ismay - 5410', Lower Ismay - 5502', Desert Creek - 5612' Salt - Approx. 5784'. T.D. (Log T.D. 5798'). On 7-5-79 a DST of the Lower Ismay from 5523' to 5571' was run with the following results: Initial Hydro. Press 2714#, Initial Flow(15min.)=66.5#, Final after 15min 119.7#, Closed in 60min.*985.4#, 2ndFlow: Initial = 159.6#, Final after open 90 min.=172.9#, Final Shut-in after closed 60 min.=505.4#, Final Hydro. mud press.=2713.8#. Recovered 460' of gas & oil cut mud, as follows: Top sample = 20% oil, 80% mud, Middle:=10% oil, 90% mud, Bottom:= 25% oil, 75% mud. Sampler at very bottom contained 100% oil. Only a little muddy filtrate water was found in the bottom joint above the sampler, which was 100% oil.

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

SIGNED

Ashton B. Geren, Jr.
Ashton B. Geren, Jr.

TITLE

Geological Consultant for:

R.C. Anderson

DATE

Sept. 28, 1979

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

OCT 12 1979

*See Instructions on Reverse Side

U. S. GEOLOGICAL SURVEY
DURAND, COLO.

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

SUBMIT IN TRIPPLICATE*
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.
U-24938A (U-942)

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

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.)

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
R.C. Anderson Oil Properties

3. ADDRESS OF OPERATOR
1060 Denver Club Bldg., Denver Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface **674' FSL, 2038' FWL Sec. 23 - 39S-21E
San Juan County, Utah**

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Cottonwood Wash

9. WELL NO.
No. 1-23 Skyline Fed.

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

SESW Sec. 23-39S-21E

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
4590 GR 4603 KB

12. COUNTY OR PARISH
San Juan

13. STATE
Utah

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF
FRACTURE TREAT
SHOOT OR ACIDIZE
REPAIR WELL
(Other)

PULL OR ALTER CASING
MULTIPLE COMPLETE
ABANDON*
CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF
FRACTURE TREATMENT
SHOOTING OR ACIDIZING
(Other)

REPAIRING WELL
ALTERING CASING
ABANDONMENT*

Set Surf. & Intermediate

(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.)

*The above captioned well was spudded at 10:00 AM on 6-11-79 and a 12 1/4" hole was mud drilled to approx. 310' and then reamed to 17 1/2" hole to a depth of 310'. Ran 7 jts. of 133/8" surface casing 48# H-40, 300.96' & set @ 303.00' GR or 316' KB. Cemented with 330 sx. of Cl. H Cement & 2% CaCl. Cement cir. to surf., Plug down at 3:00 PM 6-13-79. Tested csg. to 600 PSig. Press. held OK for 30 Min. On 6-14-79 mud drilled out from under surface with a 8 3/4" hole and continued drilling to a depth of 1701' and then reamed the hole with 12 1/4" bit to a depth 1700' reached at 6:50 PM on 6-18-79. Ran 48 jts. of 24# K-55 8 5/8" Casing set at 1703' & cemented with 500 sx. of Cl B Cement. & 1% CaCl. Plug down at 3:00 P.M. 6-19-79. WOC. 6-20-79 Nippled up, pressured csg. to 800 psig., held OK for 30 Min. Preparing to drill out from under intermediate string with 7 7/8" bit.

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

SIGNED

Ashton B. Geren, Jr.
Ashton B. Geren, Jr.

Geological Consultant for:

TITLE **R.C. Anderson**

DATE **Sept. 28, 1979**

(This space for Federal or State office use)

APPROVED BY _____

CONDITIONS OF APPROVAL, IF ANY:

TITLE _____

DATE **OCT 12 1979**

U. S. GEOLOGICAL SURVEY

*See Instructions on Reverse Side

*See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. U-24938A (U-942)	
2. NAME OF OPERATOR R.C. Anderson Oil Properties		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
3. ADDRESS OF OPERATOR 1060 Denver Club Bldg., Denver, Colorado 80202		7. UNIT AGREEMENT NAME	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 674' FSL, 2038' FWL Sec. 23 - 39S-21E San Juan County, Utah		8. FARM OR LEASE NAME Cottonwood Wash	
14. PERMIT NO.		9. WELL NO. No. 1-23 Skyline Fed.	
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 4590 GR 4603 KB		10. FIELD AND POOL, OR WILDCAT Wildcat	
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA SESW Sec. 23-39S-21E	
		12. COUNTY OR PARISH San Juan	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 <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input checked="" type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	

(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.)*

On 7-5-79 after careful consideration of all of the well data, Sample information, DST data, and log data, it was decided to plug & abandon. Verbal permission to P.&A. in the following manner was received from the U.S.G.S.: Pump place with drillpipe, cement plugs in the follow intervals: 5650' to 5400', 4600' to 4500', 2700' to 2600' & 1750 to 1650'. The well was to be capped at the surface & standard dry hole marker installed, and well turned over to the BLM for use as a water well as needed. Anderson could retain right to use water from this well for future drilling if necessary. Pits to be fenced and to be filled as soon as sufficient drying occurs, then location restored to as near original condition & seeded as required.

On 7-6-79 the well was abandoned as follows: Cement plugs pump placed through drillpipe as follows: 5800' to 5350' (133 sx), 4600' to 4450' (56 sx), 2800' to 2600' (75 sx), 1750' to 1600' (68 sx). Well was capped and dryhole marker installed. Location was cleaned up and all pits fenced. Location pits shall be filled & location restored to as near original when pits dry sufficiently, then location shall be seeded as required.

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

SIGNED Ashton B. Garen, Jr. TITLE Geological Consultant for: R.C. Anderson DATE Sept. 28, 1979

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY: _____

OCT 12 1979

U. S. GEOLOGICAL SURVEY
DENVER, COLO.

**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.

14

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL GAS WELL DRY Other _____

b. TYPE OF COMPLETION:
NEW WELL WORK OVER DEEP-EN PLUG BACK DIFF. DESVR. Other P. & A.

2. NAME OF OPERATOR
R.C. Anderson Oil Properties

3. ADDRESS OF OPERATOR
1060 Denver Club Bldg., Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface 674' FSL, 2038' FWL Sec.23 - 39S-21E
At top prod. interval reported below
At total depth Same

14. PERMIT NO. _____ DATE ISSUED Jan 1979

5. LEASE DESIGNATION AND SERIAL NO.

U-24938A (U-942)

6. IF INDIAN, ALLOTTEE OR TRIBE NAME _____

7. UNIT AGREEMENT NAME _____

8. FARM OR LEASE NAME

Cottonwood Wash

9. WELL NO.

No. 1-23 Skyline Fed.

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA

SESW Sec. 23-39S-21E

12. COUNTY OR PARISH San Juan 13. STATE Utah

15. DATE SPUNDED 6-11-79 16. DATE T.D. REACHED 7-3-79 17. DATE COMPL. (Ready to prod.) P. & A. 7-6-79 18. ELEVATIONS (DF, REB, RT, GR, ETC.)* 4590 GR 4603 KB 19. ELEV. CASINGHEAD 4590

20. TOTAL DEPTH, MD & TVD 5798 (log) 21. PLUG BACK T.D., MD & TVD P. & A. 22. IF MULTIPLE COMPL., HOW MANY* _____ 23. INTERVALS DRILLED BY _____ ROTARY TOOLS _____ CABLE TOOLS _____

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
None: P. & A. 25. WAS DIRECTIONAL SURVEY MADE Yes
Dev. Surveys

26. TYPE ELECTRIC AND OTHER LOGS RUN Induction-SFL, Compensated Neutron-Formation Density, & Borehole Compensated Sonic. 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
<u>13 3/8"</u>	<u>48#</u>	<u>316</u>	<u>17 1/2"</u>	<u>330 sx.</u>	<u>None</u>
<u>8 5/8"</u>	<u>24#</u>	<u>1703</u>	<u>12 1/4"</u>	<u>500 sx.</u>	<u>None</u>

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)

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33. PRODUCTION

DATE FIRST PRODUCTION None PRODUCTION METHOD (Flooding, gas lift, pumping—size and type of pump) _____ 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 _____

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

Geological Consultant for: OCT 12 1979

SIGNED Ashton B. Goren, Jr. TITLE Robert C. Anderson DATE Sept. 28, 1979

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

U. S. GEOLOGICAL SURVEY
DENVER, COLO.

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 as 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 38, 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: "Seals Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

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

Note: Well History & test data show on Sundry Notice:

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.	GEOLOGIC MARKERS		
	Surf.	appx. 1100			NAME	MEAS. DEPTH	TOP
Navajo ss				fine to med. org.-bn ss (Fresh water at appx. 600')			
Kayenta	1100	1520		Rd shales & fine to med. sd. with more fresh water (100 bbl./hr).			
Chinle	1520	2648	2648	Primarily rd sh & rd siltstn.			
DeChelly	2648	2745	2745	Rd siltstn & wt-rd sd			
Organ Rock	2745	4550	4550	Rd sh & siltstn becoming calc. near bottom.			
Hermosa	4550	5410	5410	Rd sh, rd siltstn, grading into argil. lm. No shows indicated.			
Paradox	5410	5502	5502	Lm poor pos. w/scatt. Fluor.			
Upper Ismay	5410	5612	5612	Lm with mostly poor por. & Scatt. light Fluor. Fair por. from 5544-52.			
Lower Ismay	5502						
Desert Creek	5612	5784	5784	Lm & Argil. Dolomite with Scatt. light Fluor. Por. in part, appears & calculates on log to have high water value.			
Salt	5784	5798TD.	5798TD.	Salt			

COTTONWOOD WASH SKYLINE FEDERAL 1-23 1 5523' - 5571'

Legal Location

Sec. - Twp. - Rng.

Lease Name

Well No.

Test No.

Field Area

Med. from Tester Valve

Country

State

23 - 385 - 21E

WILDCAT

SAN JUAN

UTAH

ROBERT C. ANDERSON

Lease Owner/Company Name

9

FLUID SAMPLE DATA				Date 7-5-79		Ticket Number 538483	
Sampler Pressure 0 P.S.I.G. at Surface		Kind of Job OPEN HOLE		Halliburton District FARMINGTON		Witness MR. GEREN	
Recovery: Cu. Ft. Gas .21		Tester MR. AULD		Drilling MR. ROBINSON		Contractor ODECO DRILLING COMPANY BC S	
cc. Oil 1500		Straddle		EQUIPMENT & HOLE DATA			
cc. Water		Drill Collar Length 283' I.D. 1.75"		Formation Tested Desert Creek		Elevation 4603' Ft.	
cc. Mud		Drill Pipe Length 5203' I.D. 2.764"		Net Productive Interval 48' Ft.		All Depths Measured From Kelly Bushing	
Tot. Liquid cc. 1500		Packer Depth(s) 5517' - 5523' - 5571' Ft.		Total Depth 5798' Ft.		Main Hole/Casing Size 7 7/8"	
Gravity ° API @ ° F.		Depth Tester Valve 5499' Ft.		Drill Collar Length 283' I.D. 1.75"		Drill Pipe Length 5203' I.D. 2.764"	
Gas/Oil Ratio		RESISTIVITY		CHLORIDE CONTENT		Packer Depth(s) 5517' - 5523' - 5571' Ft.	
Recovery Water @ ° F. ppm		Mud Weight 9.3 vis 45 sec		Cushion TYPE AMOUNT		Surface Choke 3/4" ADJ. Bottom Choke .75"	
Recovery Mud @ ° F. ppm		Cushion TYPE AMOUNT		Recovered 460 Feet of Gas and oil cut mud		Recovered Feet of	
Recovery Mud Filtrate @ ° F. ppm		Cushion TYPE AMOUNT		Recovered Feet of		Recovered Feet of	
Mud Pit Sample .8735 @ 82 ° F. ppm		Cushion TYPE AMOUNT		Recovered Feet of		Recovered Feet of	
Mud Pit Sample Filtrate @ ° F. ppm		Cushion TYPE AMOUNT		Remarks Had 10' of fill. SEE PRODUCTION TEST DATA SHEET.			
TEMPERATURE		Gauge No. 2033		Gauge No. 2032		Gauge No. 7489	
Depth: 5503' Ft.		Depth: 5559' Ft.		Depth: 5794' Ft.		TIME	
12 Hour Clock		24 Hour Clock		24 Hour Clock		Tool Opened 1055 A.M. P.M.	
Blanked Off NO		Blanked Off NO		Blanked Off YES		Opened A.M. P.M.	
Actual 124 ° F.		Pressures		Pressures		Bypass 1440 P.M.	
Field Office		Field Office		Field Office		Reported Computed	
Initial Hydrostatic 2713.8 2706.9		2742.1 2735.3		2863.9		Minutes Minutes	
Flow Initial 66.8 21.2		52.8 65.9		HYDROSTATIC		15 15	
Flow Final 119.7 113.0		105.6 126.6		RELEASE: 2768.8		60 59	
Closed in 985.4 989.3		1014.6 1006.6				90 90	
Flow Initial 159.6 134.3		158.4 142.4				60 61	
Flow Final 172.9 179.5		263.9 197.8					
Closed in 505.4 506.6		527.7 527.6					
Flow Initial							
Flow Final							
Closed in							
Final Hydrostatic 2713.8 2706.9		2742.1 2735.3		2835.8			

Casing perms. _____ Bottom choke _____ Surf. temp _____ °F Ticket No. 538483
 Gas gravity _____ Oil gravity _____ GOR _____
 Spec. gravity _____ Chlorides _____ ppm Res _____ @ _____ °F
INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED.

Date Time	Choke Size	Surface Pressure psi	Gas Rate MCF	Liquid Rate BPD	Remarks
7-4-79 a.m. p.m.					
2311					On location, waited for additional tools
7-5-79 0530					Tools on location
0545					Picked up tools
0838					Tool on, trip in
1055					Opened tool with a good blow
1110					Closed tool
1210	Bubble Hose	22.5#			Opened tool with a very good blow
1250	"	"			Burned
1257	"	"			
1258	1/4"	12.5#			
1259	"	8#			
1300		6#			
1301		4.5#			
1302		3#			
1303		2#			
1304		1.5#			
1305		1#			
1306		1 oz.			
1307	1/8"	2 oz.			
1316	"	1.5 oz.			
1323	"	2 oz.			
1336		1 oz.			
1340					Closed tool
1440					Opened by-pass, trip out
2045					Job completed

Gauge No. 2033			Depth 5503'			Clock No. 14283			12 hour		Ticket No. 538483			
First Flow Period		First Closed In Pressure			Second Flow Period		Second Closed In Pressure			Third Flow Period		Third Closed In Pressure		
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.
0	.0000	21.2	.0000	113.0	.0000	134.3	.0000		179.5					
1	.0210	58.5	.0345	190.1*	.1032	171.5	.0474		190.1**					
2	.0420	86.4	.0759	296.5	.2063	178.1	.0880		204.7					
3	.0630	105.0	.1173	400.2	.3095	187.5	.1286		223.4					
4	.0840	105.0	.1587	500.0	(.3370	187.5)C	.1693		253.9					
5	.1050	113.0	.2001	595.9	.4127	168.8	.2099		300.5					
6			.2414	686.6	.5158	172.8	.2505		345.7					
7			.2828	767.9	.6190	179.5	.2911		386.9					
8			.3242	847.9			.3318		425.5					
9			.3656	919.9			.3724		466.7					
10			.4070	989.3			.4130		506.6					
11														
12														
13														
14														
15														

Gauge No. 2032			Depth 5559'			Clock No. 14128			24 hour	
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Minutes
0	.0000	65.9	.0000	126.6	.0000	142.4	.0000		197.8	
1	.0100	88.3	.0168	216.3*	.0500	180.7	.0233		207.1**	
2	.0200	114.7	.0369	320.5	.1000	192.6	.0433		221.6	
3	.0300	126.6	.0571	426.1	.1500	201.8	.0632		240.1	
4	.0400	124.0	.0772	523.6	(.1640	204.4)C	.0832		267.8	
5	.0500	126.6	.0973	623.6	.2000	184.7	.1032		316.6	
6			.1175	710.5	.2500	188.6	.1231		361.4	
7			.1376	793.4	.3000	197.8	.1431		403.7	
8			.1577	871.0			.1631		445.9	
9			.1779	943.4			.1830		488.1	
10			.1980	1006.6			.2030		527.6	
11										
12										
13										
14										
15										
Reading Interval	3		6		15		6			Minutes

REMARKS: *Interval = 5 minutes **Interval = 7 minutes C = Choke change

	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing	6"	3"	1'	
Reversing Sub				
Water Cushion Valve				
Drill Pipe	3 1/2"	2.764"	5203'	
Drill Collars	5 3/4"	1.75"	283'	
Handling Sub & Choke Assembly				
Dual CIP Valve	5.03"	.87"	3'	
Dual CIP Sampler	5"	2.75"	4'	
Hydro-Spring Tester	5"	.75"	5'	5499'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	2.75"	4'	5503'
Hydraulic Jar	5.03"	1.75"	5'	
VR Safety Joint	5"	1"	3'	
Pressure Equalizing Crossover				
Packer Assembly	6 3/4"	1.53"	6'	5517'
Distributor				
Packer Assembly	6 3/4"	1.53"	6'	5523'
Flush Joint Anchor	5 3/4"	3.5"	11'	
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case	5 3/4"	3.5"	2'	5559'
Drill Collars	5 3/4"	1.75"	26'	
Anchor Pipe Safety Joint				
VR Safety joint	5"	1"	3'	
Packer Assembly	6 3/4"	1.53"	6'	5571'
Distributor				
Packer Assembly				
Anchor Pipe Safety Joint				
Side Wall Anchor				
Drill Collars	5 3/4"	1.75"	214'	
Flush Joint Anchor	5 3/4"	3.5"	9'	
Blanked-Off B.T. Running Case	5 3/4"	2.44"	4'	5794'
Total Depth				5798'

Formation Testing Service Report

COTTONWOOD WASH SKYLINE

FEDERAL

1-23

Test No. 1

5523' - 5571'

ROBERT C. ANDERSON

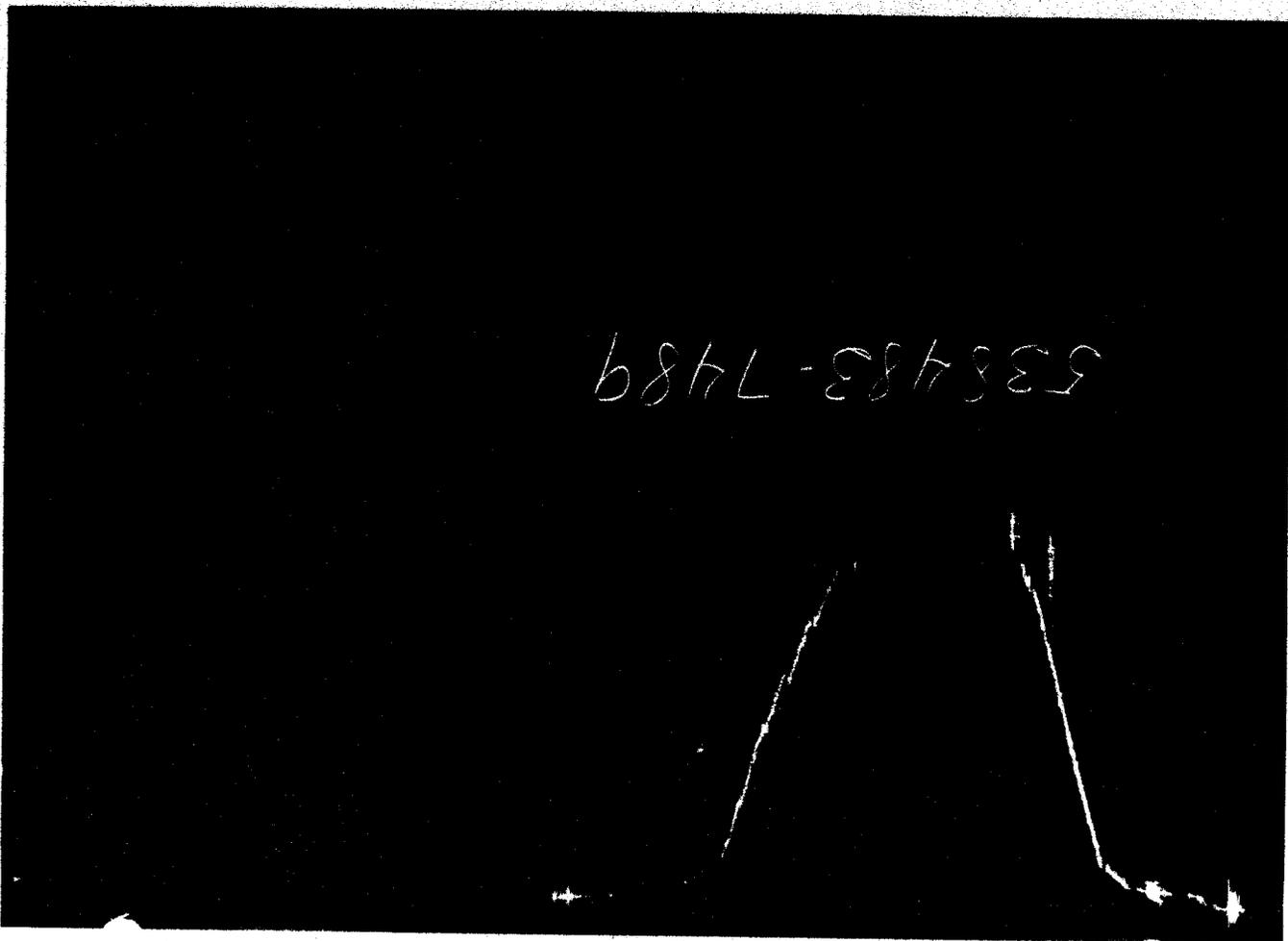
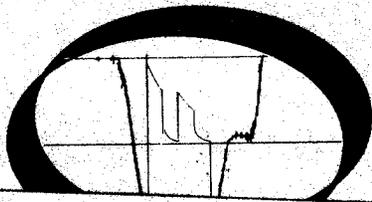
Lease Owner/Company Name

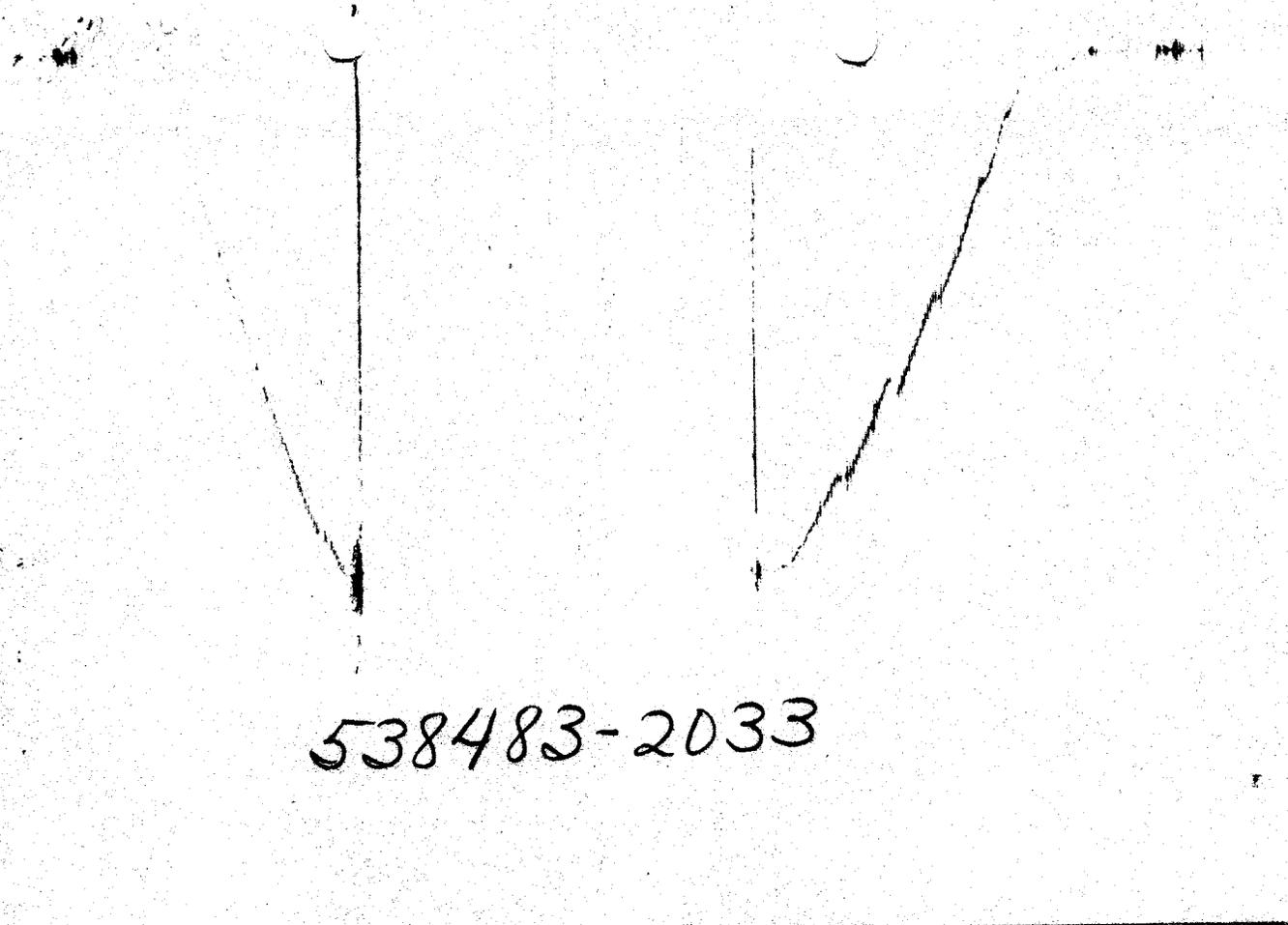
Lease Name

Well No.

Test No.

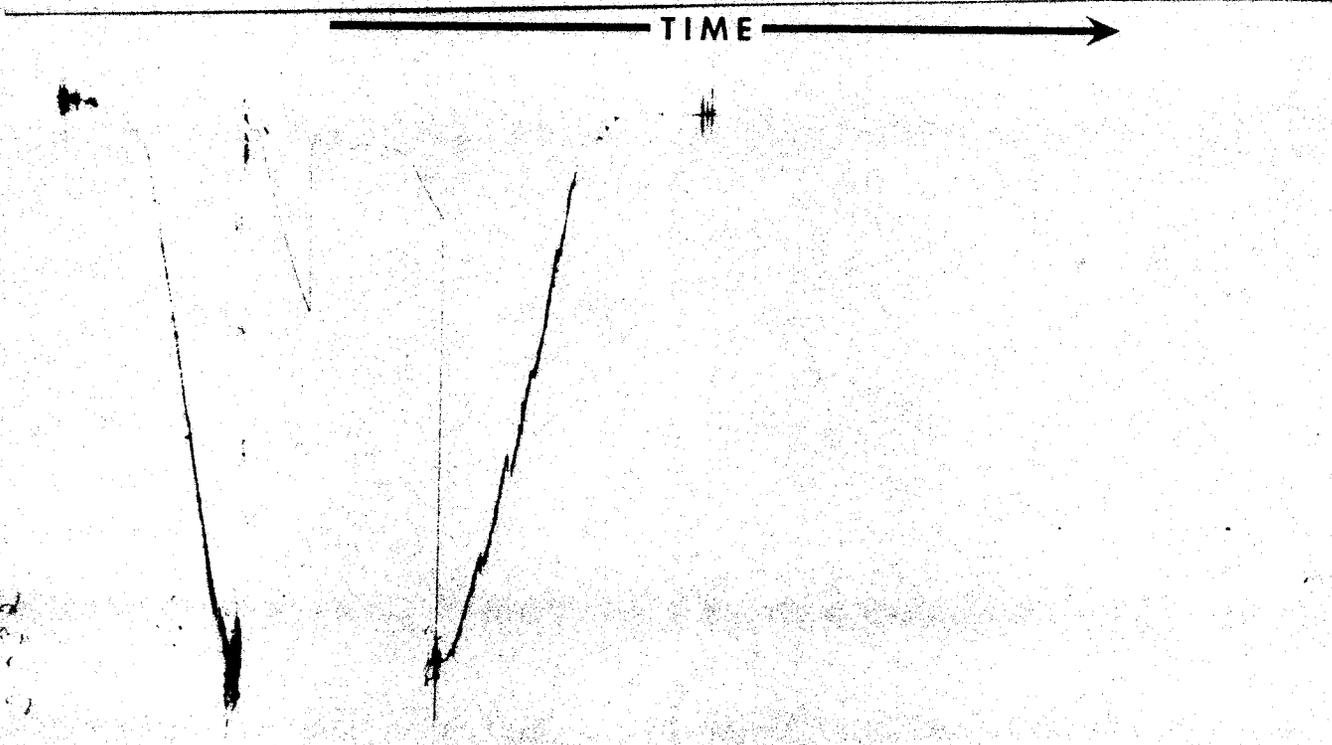
Tested Interval





538483-2033

This graph shows a pressure-time curve for sample 538483-2033. The vertical axis is labeled 'PRESSURE' with a downward-pointing arrow, and the horizontal axis is labeled 'TIME' with a rightward-pointing arrow. The curve starts at a high pressure, drops sharply to a minimum, and then rises back to the initial high pressure. A vertical dashed line is drawn from the minimum point to the horizontal axis.



538483-2032

This graph shows a pressure-time curve for sample 538483-2032. The vertical axis is labeled 'PRESSURE' with a downward-pointing arrow, and the horizontal axis is labeled 'TIME' with a rightward-pointing arrow. The curve starts at a high pressure, drops sharply to a minimum, and then rises back to the initial high pressure. A vertical dashed line is drawn from the minimum point to the horizontal axis.

Each Horizontal Line Equal to 1000 p.s.i.

NOMENCLATURE

b	= Approximate Radius of Investigation	Feet
b₁	= Approximate Radius of Investigation (Net Pay Zone h ₁)	Feet
D.R.	= Damage Ratio	—
EI	= Elevation	Feet
GD	= B.T. Gauge Depth (From Surface Reference)	Feet
h	= Interval Tested	Feet
h₁	= Net Pay Thickness	Feet
K	= Permeability	md
K₁	= Permeability (From Net Pay Zone h ₁)	md
m	= Slope Extrapolated Pressure Plot (Psi ² /cycle Gas)	psi/cycle
OF₁	= Maximum Indicated Flow Rate	MCF/D
OF₂	= Minimum Indicated Flow Rate	MCF/D
OF₃	= Theoretical Open Flow Potential with/Damage Removed Max.	MCF/D
OF₄	= Theoretical Open Flow Potential with/Damage Removed Min.	MCF/D
P_s	= Extrapolated Static Pressure	Psig.
P_f	= Final Flow Pressure	Psig.
P_{o1}	= Potentiometric Surface (Fresh Water *)	Feet
Q	= Average Adjusted Production Rate During Test	bbls/day
Q₁	= Theoretical Production w/Damage Removed	bbls/day
Q_g	= Measured Gas Production Rate	MCF/D
R	= Corrected Recovery	bbls
r_w	= Radius of Well Bore	Feet
t	= Flow Time	Minutes
t_o	= Total Flow Time	Minutes
T	= Temperature Rankine	°R
Z	= Compressibility Factor	—
μ	= Viscosity Gas or Liquid	CP
Log	= Common Log	

* Potentiometric Surface Reference to Rotary Table When Elevation Not Given, Fresh Water Corrected to 100° F.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.
U-24938A (U-942)

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Cottonwood Wash

9. WELL NO.
No. 1-23 Skyline Fed

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
SESW Sec 23-39S-21E

12. COUNTY OR PARISH | 13. STATE
San Juan | Utah

1a. TYPE OF WORK
DRILL DEEPEN PLUG BACK

b. TYPE OF WELL
OIL WELL GAS WELL OTHER SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR
RC Anderson Oil Properties

3. ADDRESS OF OPERATOR
1060 Denver Club Bldg., Denver CO 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
At surface 674' FSL, 2038' FWL Sec 23-39S-21E
San Juan County, Utah
At proposed prod. zone
Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
6 miles north of Bluff, Utah

16. NO. OF ACRES IN LEASE
80

17. NO. OF ACRES ASSIGNED TO THIS WELL
80

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
Approx. 1 mile

19. PROPOSED DEPTH
5733

20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
4594 Grd

22. APPROX. DATE WORK WILL START*
February 1, 1979

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4	8 5/8	24# new or used	300	150 sx (cem to surface)
7 7/8	5 1/2	15.5# new	TD	150 sx

It is planned to drill the well to test the Ismay and Desert Creek zones of the Paradox Formation. The well will spud in the Morrison Formation. Estimated formation tops are as follows:

Navajo 668
Kayenta 1103
Chinle 1536
DeChelly 2648
Organ Rock 2748
Hermosa 4546
Paradox
*Upper Ismay 5416

*Lower Ismay 5516.
*Desert Creek 5635
TD 5733

*Potential hydrocarbon zones
All porous hydrocarbon shows will be drill stem tested.
IES and GR Sonic logs will be used
No cores are anticipated.



IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

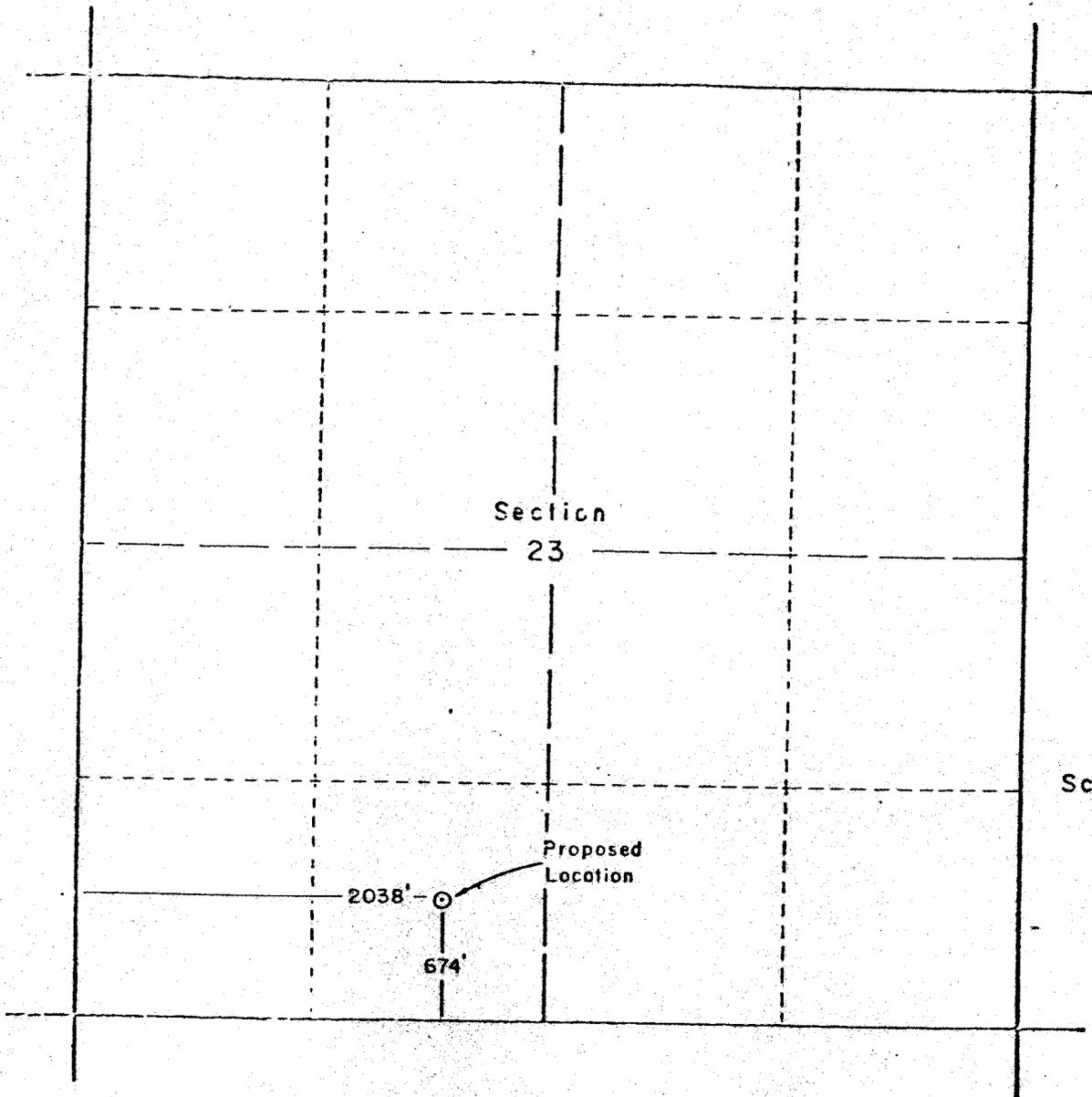
24. SIGNED Charles F. Johnson TITLE Agent for RC ANDERSON OIL PROPERTIES DATE 1-2-79

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:



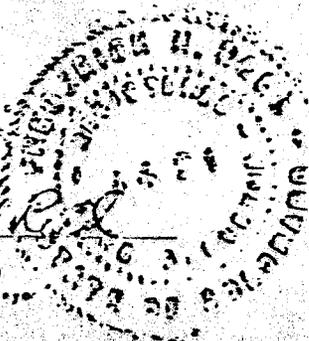
WELL LOCATION: R.C. Anderson No. 1 Cottonwood Wash — Skyline Fed.

Located 674 feet North of the South line and 2038 feet East of the West line of Section 23,
 Township 39 South, Range 21 East, Salt Lake Base & Meridian
 San Juan County, Utah
 Existing ground elevation determined at 4594 feet based on adjoining locations.

I hereby certify the above plat represents
 work done under my supervision and that it is
 to the best of my knowledge and belief

Frederick H. Reed

FREDERICK H. REED
 Registered Land Surveyor



R.C. Anderson Oklahoma City, Okla.	
WELL LOCATION PLAT Sec. 23, T 39 S, R 21 E San Juan County, Utah	
CLARK-REED & ASSOC. Surveying Engineers	DATE: Nov. 7, 1978 FILE NO: 78076

Archaeological Clearance Survey Report
for
R. C. Anderson

Location

R. C. Anderson #1, Cottonwood Wash-Skyline Federal

Prepared by:

Charles M. Haecker

Submitted by:

Meade F. Kemrer, Ph.D.
Principal Investigator

DIVISION OF CONSERVATION ARCHAEOLOGY

Contributions to Anthropology Series, No. 133
San Juan County Archaeological Research Center and Library

March 6, 1979

Introduction

The Division of Conservation Archaeology of the San Juan County Archaeological Research Center and Library has completed an archaeological survey on lands under the jurisdiction of the Bureau of Land Management to be impacted by the construction of one gas well pad by R. C. Anderson. The well pad will be located approximately 7 miles north of Bluff, Utah.

The survey project was initiated at the request of Mr. A. B. Geren on February 24, 1979. It was administered by Mr. Geren and by Dr. Meade Kemrer of the Division of Conservation Archaeology.

Legislation enacted by the Congress of the United States requires compliance with laws designed to protect archaeological resources. Laws such as the National Environmental Policy Act of 1969 (PL 91-852) and Executive Order No. 11593 entitled "Protection and Enhancement of the Cultural Environment" prevent enterprises which might result in the destruction or alteration of cultural resources. Federal and State governments and the professional scientific community have come to realize that the material remains of a prior culture are a limited, non-renewable part of the environment. As such, the State of New Mexico has enacted legislation regulating archaeological resources. The Cultural Properties Act is analogous in content to the National Historic Preservation Act of 1966 (PL 89-665), which provides for preservation of significant archaeological sites.

The fieldwork was performed by Mr. Charles M. Haecker of the DCA on March 1, 1979, under the provisions of Federal Antiquities Permit No. 78-UT-106. Also present in the field were: Mr. Bob Turri, Bureau of Land Management, Moab District Office; Mr. Don Englishman, U.S. Geological Service, Durango office; Mr. Roy Shepard, Arapaho Drilling; Mr. Harold Broome, H and S Construction; and Mr. A. B. Geren, Contractor.

Field Procedures

The proposed area to be impacted by the construction of the well pad was inspected on foot using parallel transects. In addition to the search for historic and prehistoric remains, observations related to the environmental setting were made.

Survey

The requested archaeological clearance survey involved one gas well pad on lands under the jurisdiction of the Bureau of Land Management. For specific details of location, please see the attached topographic map and paragraph descriptions below.

R. C. Anderson #1, Cottonwood Wash-Skyline Federal

Legal Description: 674' F/SL, 2038' F/EL, Section 23, T39S, R21E, Salt Lake Base 8 Meridian, San Juan County, Utah

Map Source: USGS 15' Series, Bluff Quadrangle

Land Jurisdiction: Bureau of Land Management

Area Surveyed: 250' x 300' (well pad); approximately 20' x 100' (access road); and a 300' x 300' area immediately to the west of the western edge of proposed well pad and access road.

Description: The proposed well pad is located at the base of a mesa within an area that has experienced much disturbance due to wind and water erosion. The northern portion of the study area is covered with rock fall originating from the mesa cliff, and an intermittent stream that feeds into Cottonwood Wash is situated immediately to the south of the study area. The sandy soil supports a vegetation cover primarily of rabbitbrush (Chrysothamnus nauseosus), snakeweed (Gutierrezia sarothrae), yucca (Yucca baccata), sage (Artemisia tridentata), and Russian thistle (Salsola kali). A few species of grass are also present but could not be identified at this time of year. Evidence of cow, horse and rabbit are also present.

Cultural Resources: A lithic scatter, 42-SJ-7749, was located approximately 80 feet (25 meters) west of the western edge of the proposed well pad and access road location (Figure 1) situated on aeolian-deposited sand that has built up on the talus slope of the mesa. The lithic scatter measures approximately 25 meters N-S, 15 meters E-W, and contains three discrete clusters of lithic material and remnants of three hearths. Tool types consist of 2 whole one-handed manos, slab metate fragments, a mano fragment apparently used as a hammerstone, and a possible chert core.

A cursory examination of the quartzite, chert and igneous rock debitage suggests that there is an absence of flaked, diagnostic tools within the site. A few fire-blackened and cracked rocks occur within and next to the ashy, charcoal-mixed soil stains identified as hearths.

Site Significance: 42-SJ-7749 is tentatively assigned to the Basketmaker II or Late Archaic Periods, based upon the presence of one-handed manos and slab metate fragments. (It is possible that other, temporally/culturally diagnostic materials are present on the site, but none were found). The location of the site on dune-like sand deposition and adjacent to an intermittent stream follows the settlement patterning for Archaic-Basketmaker II sites in this region (Fike and Lindsay 1976: 14). The site function appears to be that of a plant food processing and tool manufacturing locus, the latter activity based upon the abundance of unmodified debitage.

The site requires protection due to the research potential that it possesses. Relatively little is known of the prehistory in this region; the closest regional survey to the study area was within the

Bluff Bench/San Juan River and White Mesa areas a few miles to the east and northeast (Fike and Lindsay 1976). The Archaic and Basketmaker sites located on this survey possess characteristics similar to Late Archaic and Basketmaker II sites noted in Fike and Lindsay's report (1976), such as location in a dunal situation near an intermittent stream, as well as the presence of chipped and ground stone and fire-cracked rocks. The site appears to be undisturbed and may contain subsurface material. The hearths may also yield chronological and environmental exploitation information.

Recommendation: 42-SJ-7749 should be avoided during construction activities on the well pad and access road, the latter approaching the well pad from its west side (Figure 1). The access road should not come any closer than 30 feet from the east edge of the site; this 30 foot boundary line has been flagged by the archaeologist and the BLM representative. It is also recommended that the construction workers are warned by the contractor of the penalties for disturbing an archaeological site on Federal property. Archaeological clearance is recommended for R. C. Anderson #1 with the provisions that construction and construction-related activities be strictly confined within the proposed locations for the well pad and access road.

Reference Cited:

Fike, Richard E. and Lamar W. Lindsay
1976 Archaeological survey of the Bluff Bench/San Juan River
and White Mesa areas, San Juan County, Utah, 1973-1974.
Antiquities Section Selected Papers, 9. Salt Lake City.

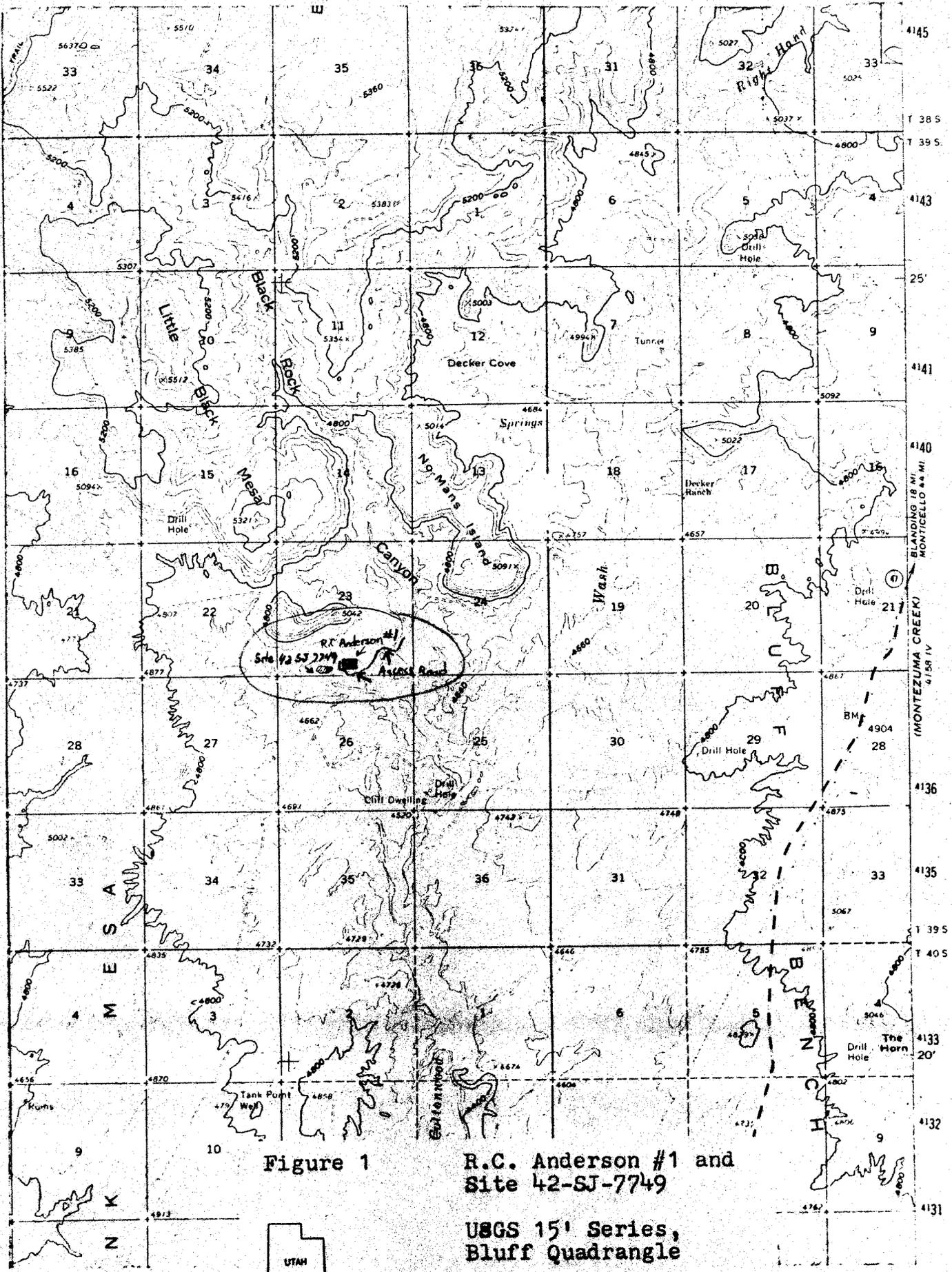


Figure 1 R.C. Anderson #1 and Site 42-SJ-7749
 USGS 15' Series, Bluff Quadrangle

SURFACE USE AND OPERATING PLANS
FOR
ROBERT C. ANDERSON OIL PROPERTIES
COTTONWOOD WASH 1-23 SKYLINE FEDERAL
SESW Sec 23, 39S, 21E
SAN JUAN COUNTY, NEW MEXICO

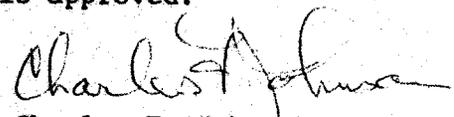
1. Location: Map No. 1 shows the location of the proposed well site in relation to the highway #47 and to the secondary roads in the area. Since the location is adjacent to the highway and short secondary road, preparation will be minimal.
2. Access Road: No new access road will be required. The well site is adjacent to an existing secondary road and approximately 5 miles from the highway. Thus no other road will be necessary.
3. Location of Existing Wells: See attached map No. 2.
4. Location of Production Equipment: A plan for the anticipated production equipment, if the well is successful, is submitted on Plat No. 2. This will probably be an oil well and will require pumping equipment, a heater-treater, and storage tanks. When production ceases this equipment will be removed and the land surface graded, levelled, and reseeded.
5. Water Supply: The water required for rig use and for drilling operations will be hauled to the location from the San Juan River by truck. This will be a distance of about 11 miles.
6. Road Material: No additional road material such as gravel, sand, culverts will be required.
7. Waste Disposal: A reserve pit and burn pit will be constructed at the well site. See Plat No. 3. All excess water, mud, and drill cuttings will be deposited into the reserve pit which will be unlined. All trash, garbage and burnable material will be put into the burn pit which will be fenced with chicken wire to prevent spreading of the debris by the wind. Both of these pits will be folded in and covered as soon as feasible after the cessation of drilling operations. A toilet will be provided for the human waste.
8. Camp Facilities And Airstrips: No camp facilities other than two or three trailer houses at the well site will be needed. No airstrips will be required.
9. Well Site Layout: A plan for the drilling equipment layout required for the drilling of the well is submitted on Plat No. 3. The approximate dimensions of the site are shown. The site will be

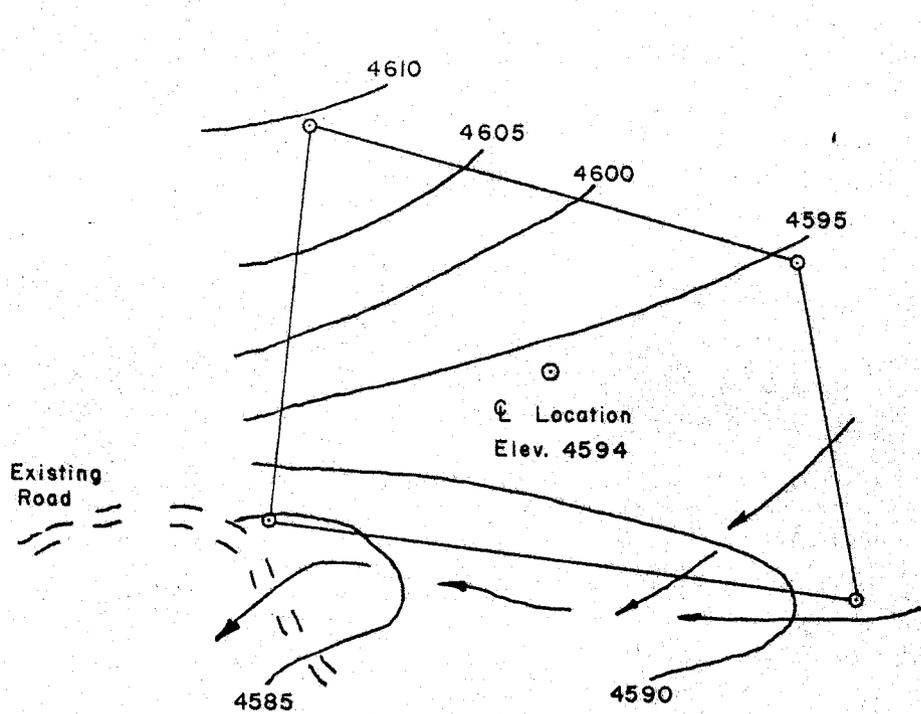
levelled for this equipment. Since the site is not level, it will be necessary to make some cuts, the removed material will be used for fill. The reserve pit will be about 4-ft. deep with 4-ft. banks. The sage brush and surface soil will be pushed to one side for replacement after the operations have been concluded.

10. Restoration: After drilling operations have been concluded and the equipment removed, the well site area will be cleaned, levelled and restored to normal. The surface soil will be pushed back over the location and the site reseeded, and the pits will be folded-in and covered. All trash and debris will be buried by at least four feet. If the well is successful, the site will be cleaned and readied for the production equipment. The pits will be covered. A small fluid pit which will be fenced may be needed for water disposal.
11. Land Description: The proposed well site is on fairly level ground and will require a minimum of work to prepare it for the drilling operations. The land surface is covered with scattered sage brush and grass. There are no trees or heavy brush on the site.
12. Representation: The operators representative at the well site will probably be A.B. Geren, Box 1469 Farmington, New Mexico (Ph. 505 327-9483). The drilling contractor has not been definitely chosen to date. The location and restoration work contractor has not been chosen as yet.
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 the work associated with the operations proposed herein will be performed by R.C. Anderson Oil Properties and its contractors in conformity with this plan and terms and conditions under which it is approved.

Date: December 28, 1978


Charles F. Johnson



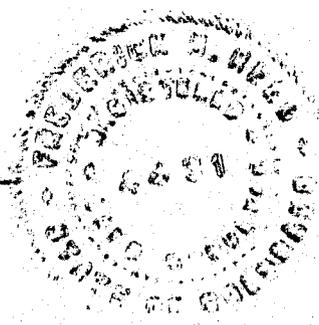
Scale : 1" = 100'

→ Dry Wash

Contour Interval - 5'

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

Frederick H. Reed
 FREDERICK H. REED
 Registered Land Surveyor

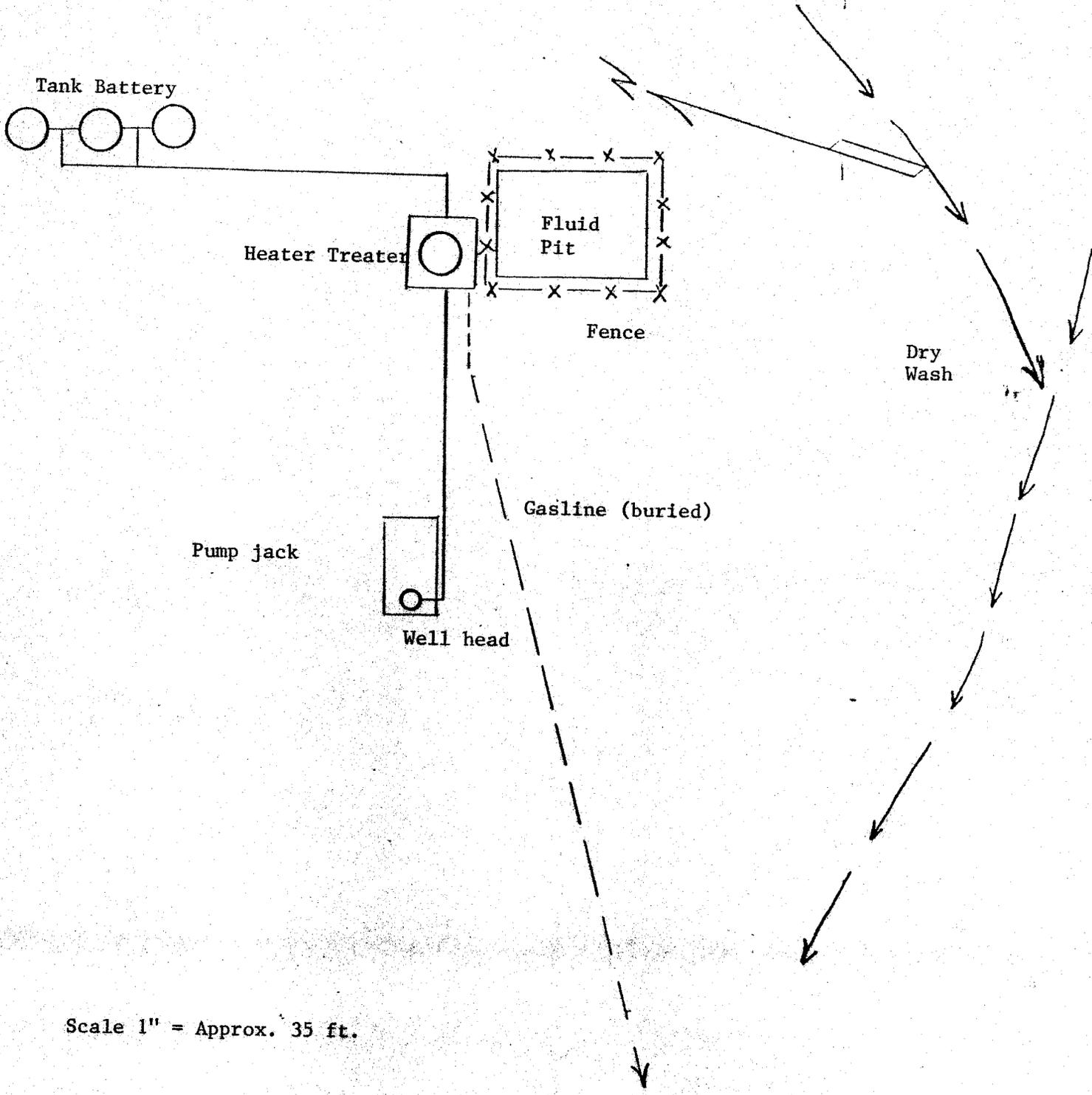


R. C. Anderson
 Oklahoma City, Okla.

WELL SITE PLAN
 Sec. 23, T 39 S, R 21 E
 San Juan County, Utah

PLANK-REED 15 45000 417 Nov. 7, 1978
 78076

PLAN FOR PRODUCTION EQUIPMENT
RC ANDERSON OIL PROPERTIES
COTTONWOOD CREEK NO.1-23 SKYLINE FED
SAN JUAN COUNTY, UTAH

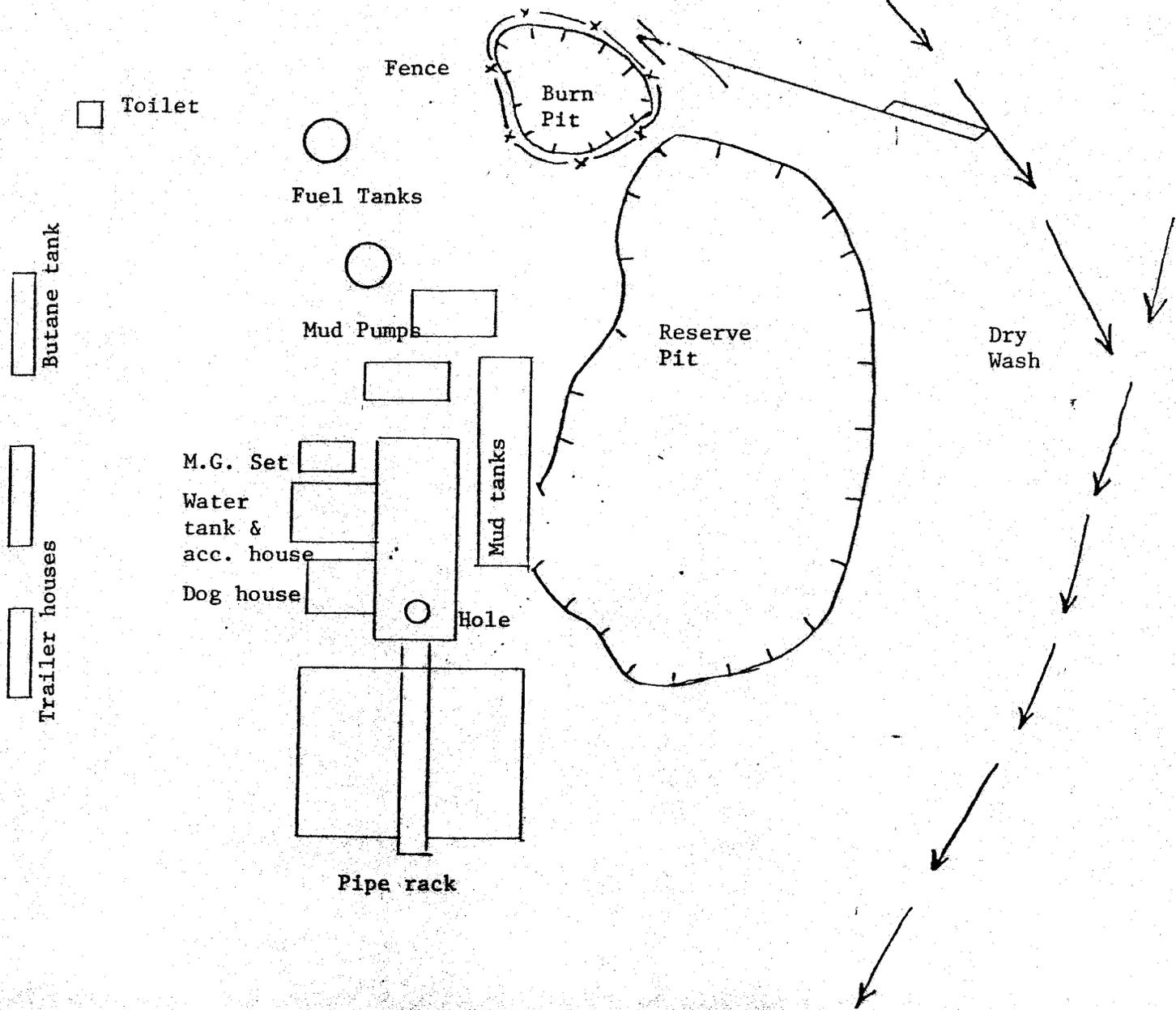


Scale 1" = Approx. 35 ft.

Present Road

PLAT NO. 2

DRILLING EQUIPMENT LAYOUT
 FOR
 RC ANDERSON OIL PROPERTIES
 COTTONWOOD CREEK NO. 1-23 SKYLINE FED
 SAN JUAN COUNTY, UTAH



Scale 1" = Approx. 35 ft.

Present Road

WELL CONTROL EQUIPMENT
ROBERT C. ANDERSON
COTTONWOOD WASH 1-23 SKYLINE FEDERAL

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

1. Surface Casing:
 - A. Hole size for surface casing is 12 $\frac{1}{4}$ "
 - B. Setting depth for surface casing is approx. 300 feet.
 - C. Casing specs. are: 8 5/8" D.D., D-55, 24.00#, 8 rd. thread, 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 150 sacks of cement which returns to 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 3 $\frac{1}{2}$ " 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: (none needed)

Shaffer, Grants or equivalent; set on top of blowout preventor and bolted securely; complete with kelly drive, pressure lubricator: 3 $\frac{1}{2}$ " 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 safety valve that can be stabbed into the drill pipe or drill collars is to be kept handy on the derrick floor at all times.
6. Anticipated Pressures:

The shut-in or formation pressures that will be encountered in the subject well are not known to be abnormally high. The pressures in the Ismay and Desert Creek zones should not be over 2200#.

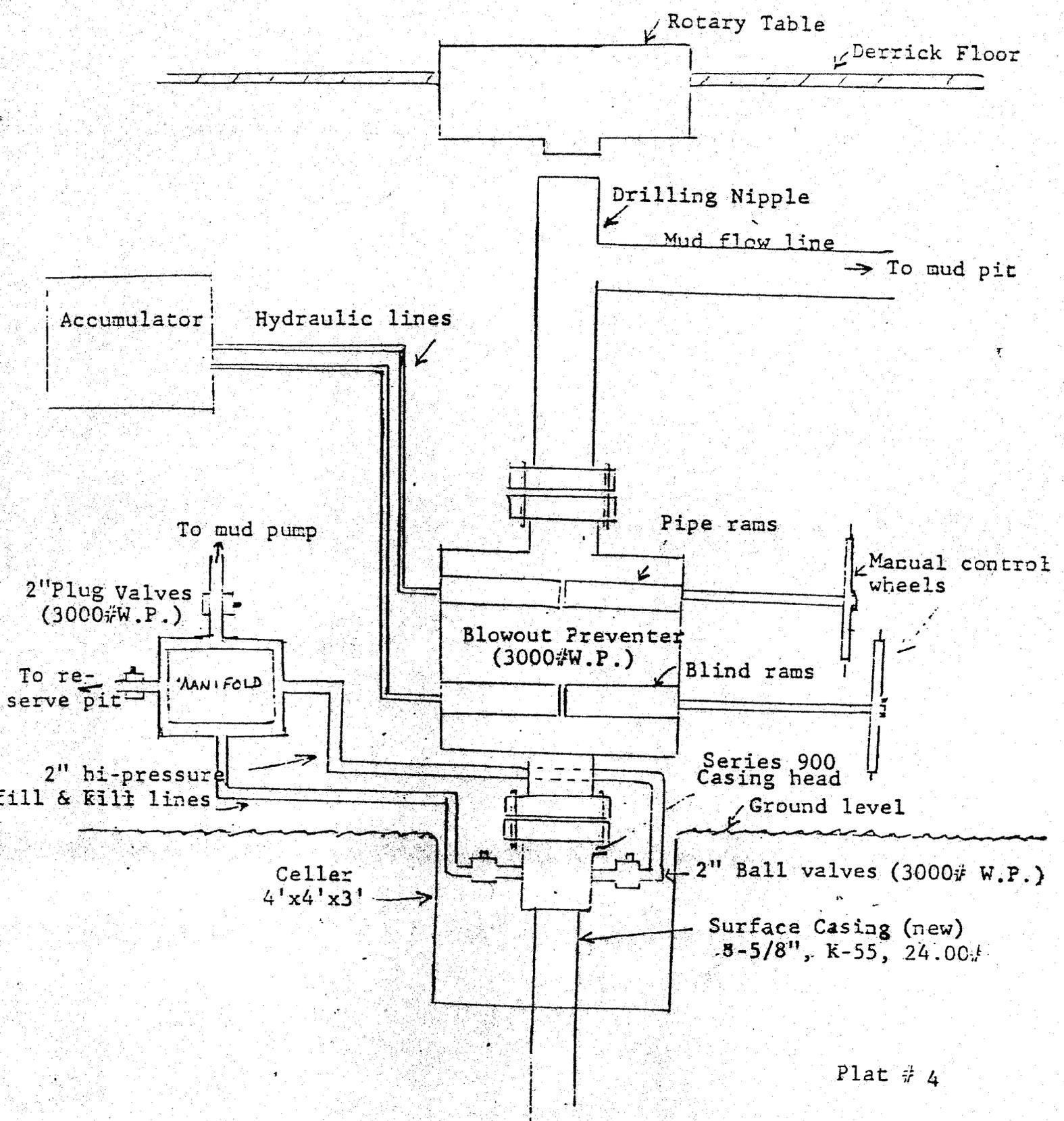
7. Drilling Fluids:

Normal fresh water gel mud will be used for the circulation medium on the subject well. The mud weight will be controlled at about 9 lbs/gal.; the viscosity at about 35-45 while drilling; and the water loss at about or below 10 cc/15 minute period.

8. Production Casing:

- A. Hole size for production casing: 7 7/8"
- B. Approx. setting depth: 6500'
- C. Casing specs.: 5 1/2" O.D., 15.5#, K-55, nes
- D. Casing will be set thru the pay zones and cemented with sufficient thixotropic or RFC cement to bring the cement top about 200 ft. above the top of the uppermost pay zone.
- C. The pay zones will be perforated, broken down, and fracture treated, if necessary. The required surface equipment will then be installed.

SCHEMATIC DIAGRAM OF
 CONTROL EQUIPMENT FOR
 RC ANDERSON OIL PROPERTIES
 COTTONWOOD WASH NO. 1-12 SKYLINE FED
 SAN JUAN COUNTY, UTAH



ASHTON B. GEREN, JR.
P.O. Box 1469
Farmington, New Mexico 87401

November 13, 1979

Ref: R.C. Anderson Oil Properties
Cottonwood Wash
No. 1-23 Skyline Fed. (Wildcat)
SESW Sec. 23 - T39S - R21E
San Juan Co., Utah
Lease No. U-24938A (U-942)

Division of Oil, Gas & Mining
State Of Utah
1588 West North Temple
Salt Lake City, Utah 84116

Attention: Mr. Mike Minder

Dear Mr. Minder:

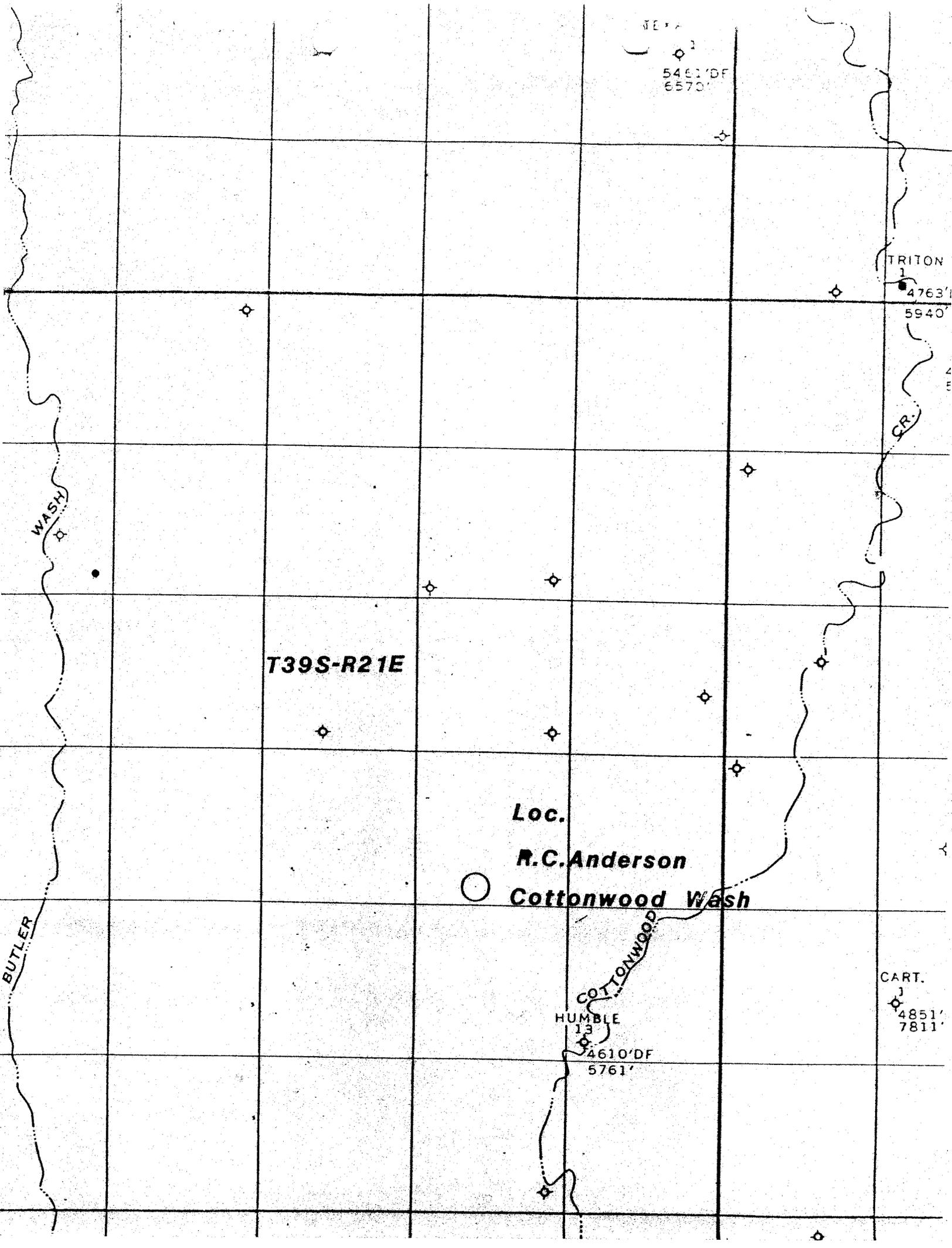
Thank you for your telephone call this morning related to well report filings required by the State of Utah.

I am enclosing here all of the forms and logs that were filed with the U.S.G.S. regarding the above captioned well.

Yours very truly,

Ashton B. Geren, Jr.
Ashton B. Geren, Jr.
Geological Consultant

NOV 20 1979



DETA
1
5461'DF
6570'

TRITON
1
4763'
5940'

T39S-R21E

Loc.
R.C. Anderson
Cottonwood Wash

HUMBLE
13
4610'DF
5761'

CART.
3
4851'
7811'

Abstract

An archaeological survey was performed on March 1, 1979, for R. C. Anderson by the Division of Conservation Archaeology of the San Juan County Archaeological Research Center and Library. The survey involved one gas well pad on lands under the jurisdiction of the Bureau of Land Management. Cultural remains attributable to the late Archaic-Basketmaker II period were located approximately 80 feet west of the western edge of the well pad. The site will require protection from possible disturbance by construction activities. Archaeological clearance has been recommended for the well pad since no cultural remains exist within the area of primary impact.

** FILE NOTATIONS **

DATE: Nov 20, 1979

Operator: P.C. Anderson Oil Properties

Well No: Skyline Federal #1-23

Location: Sec. 23 T. 39S R. 21E County: San Juan

File Prepared:

Entered on N.I.D.:

Card Indexed:

Completion Sheet:

API Number 43-037-30517

CHECKED BY:

Geological Engineer: _____

Petroleum Engineer: _____

Director: _____

APPROVAL LETTER:

Bond Required:

Survey Plat Required:

Order No. _____

O.K. Rule C-3

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

Lease Designation Std

Plotted on Map

Approval Letter Written