FILE NOTATIONS

Entered in N I D File	✓	Checked by Chief	
Entered On S R Sheet		Copy N I D to Field Office	
Location Map Pinned	✓	Approval Letter	
Card Indexed	✓	Disapproval Letter	
I W R for State or Fee Land			

COMPLETION DATA:

Date Well Completed 4/30/79 — Location Inspected

OW ✓ WW TA — Bond released

S|GW ✓ OS PA — State of Fee Land

LOGS FILED

Driller's Log ✓

Electric Logs (No.) ✓

E I E-I GR GR-N Micro

Lat Mi-L Sonic Others

Form OGC-1a

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

5. Lease Designation and Serial No.

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

6. If Indian, Allottee or Tribe Name

1a. Type of Work
DRILL [X] DEEPEN [ ] PLUG BACK [ ]

7. Unit Agreement Name

b. Type of Well
Oil Well [ ] Gas Well [ ] Other Single Zone [ ] Multiple Zone [ ]

8. Farm or Lease Name
3-1 Anschutz Ranch

2. Name of Operator
THE ANSCHUTZ CORPORATION

9. Well No.
1

3. Address of Operator
1110 Denver Club Building, Denver, Colorado 80202

10. Field and Pool, or Wildcat
Wildcat

4. Location of Well (Report location clearly and in accordance with any State requirements.*)
At surface
745.2' FNL & 885.2' FWL
At proposed prod. zone

11. Sec., T., R., M., or Blk. and Survey or Area
NW NW 3-3N-7E

RECEIVED JUL 15 1977 GAS, & MINING

14. Distance in miles and direction from nearest town or post office*
Upton - 8 miles SW from location

12. County or Parrish 13. State
Summit Utah

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. line, if any) 745.2'

16. No. of acres in lease 640.38

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. 2500'

19. Proposed depth 16,000'

20. Rotary or cable tools Rotary

21. Elevations (Show whether DF, RT, GR, etc.)
7221.8' GR

22. Approx. date work will start*

23.

PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
24"	20"	94	100'	225 sx
17-1/2"	13-3/8"	48	1,600'	400 sx
12-1/4"	9-5/8"	40-43.5	9,300'	900 sx
8-1/2"	5-1/2"	15-17	16,000'	1100 sx

We propose to drill subject well to an approximate depth of 16,000' to adequately test the subthrust Nugget sand formation. Mud and BOP programs will be those generally used in this area as in Pineview Field. No cores are planned at this time; a full suite of electric logs will be run to total depth including dipmeter-directional surveys. Drillstem tests will be run as warranted by evaluation of samples and logs. If production is encountered, casing will be set through the indicated pay-zones and selectively perforated; frac'ing or acidizing may be necessary to stimulate production.

Survey plats are attached.

Blanket drilling bond is on file.

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.

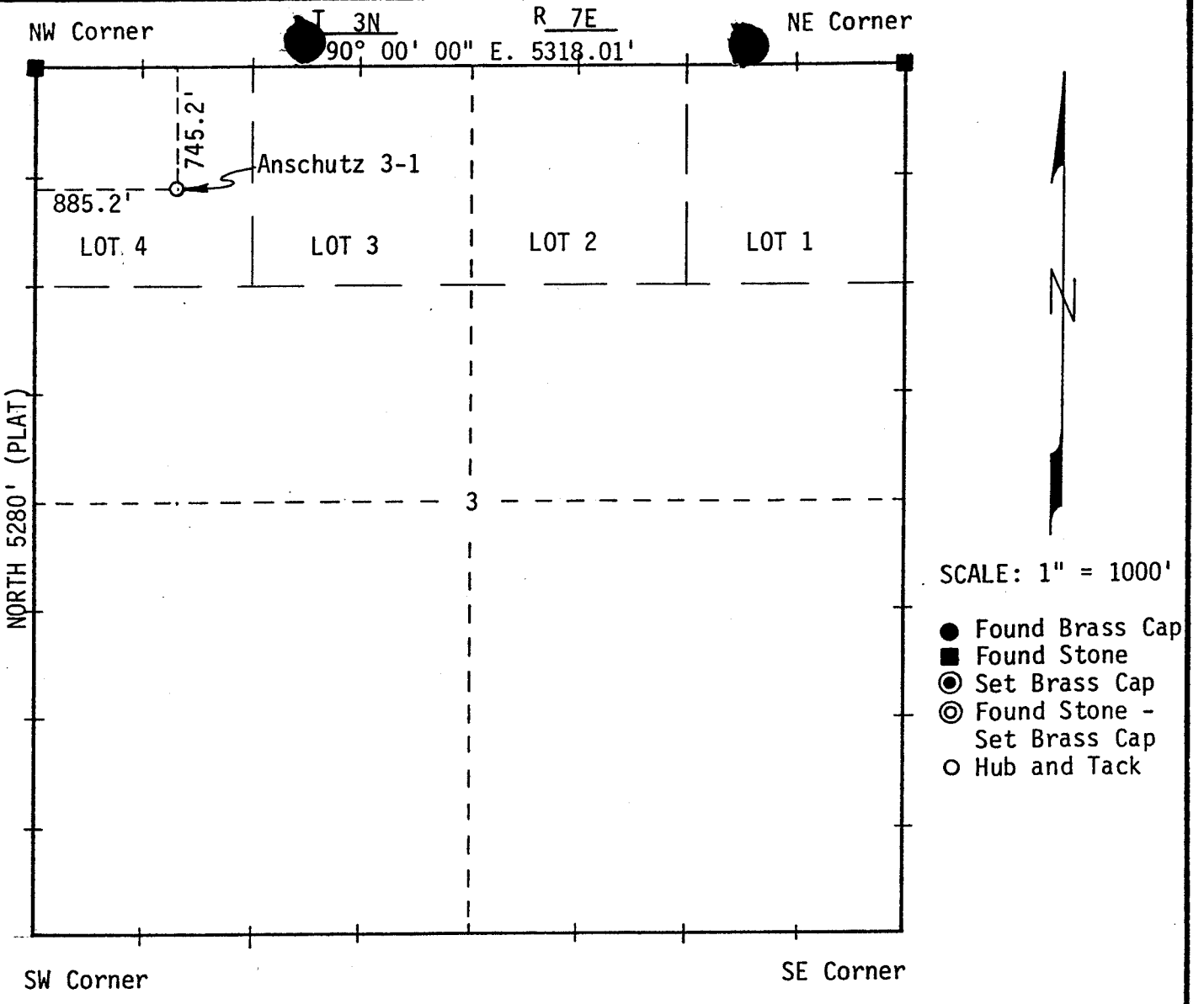
Signed Wayne C. Pierce Title Operations Engineer Date 7-13-77

(This space for Federal or State office use)

Permit No. 43-043-30058 Approval Date

Approved by Title Date
Conditions of approval, if any:

*See Instructions On Reverse Side



I, John A. Proffit of Evanston, Wyoming certify that in accordance with a request from Wayne Pierce of Denver, Colorado for Anschutz Corporation I made a survey on the 1st day of June, 19 77 for Location and Elevation of the Anschutz 3-1 as shown on the above map, the wellsite is in the NW¼ NW¼ (Lot 4) of Section 3, Township 3N, Range 7E of the Salt Lake Base & Meri. Summit County, State of Utah, Elevation is 7221.8 Feet top of hub Datum U.S.G.S. Quadrangle - Castle Rock Utah - Spot Elevation 7722', SW¼ SE¼ Sec. 34, T 4 N, R 7 E, Salt Lake Base & Meridan

Reference point North 100.1' 5/8" rebar Elevation top of hub 7224.0'

Reference point East 300.1' " " " 7251.1'

Reference point South 200.0' " " " 7211.1'

Reference point West 150.2' " " " 7204.2'

John A. Proffit 6/9/77

JOHN A. PROFFIT, UTAH R.L.S. NO. 2860

DATE: June 9, 1977
JOB NO.: 77-101

UINTA ENGINEERING & SURVEYING, INC.
808 MAIN STREET, EVANSTON, WYOMING

Instructions

General: This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate action by either a Federal 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.

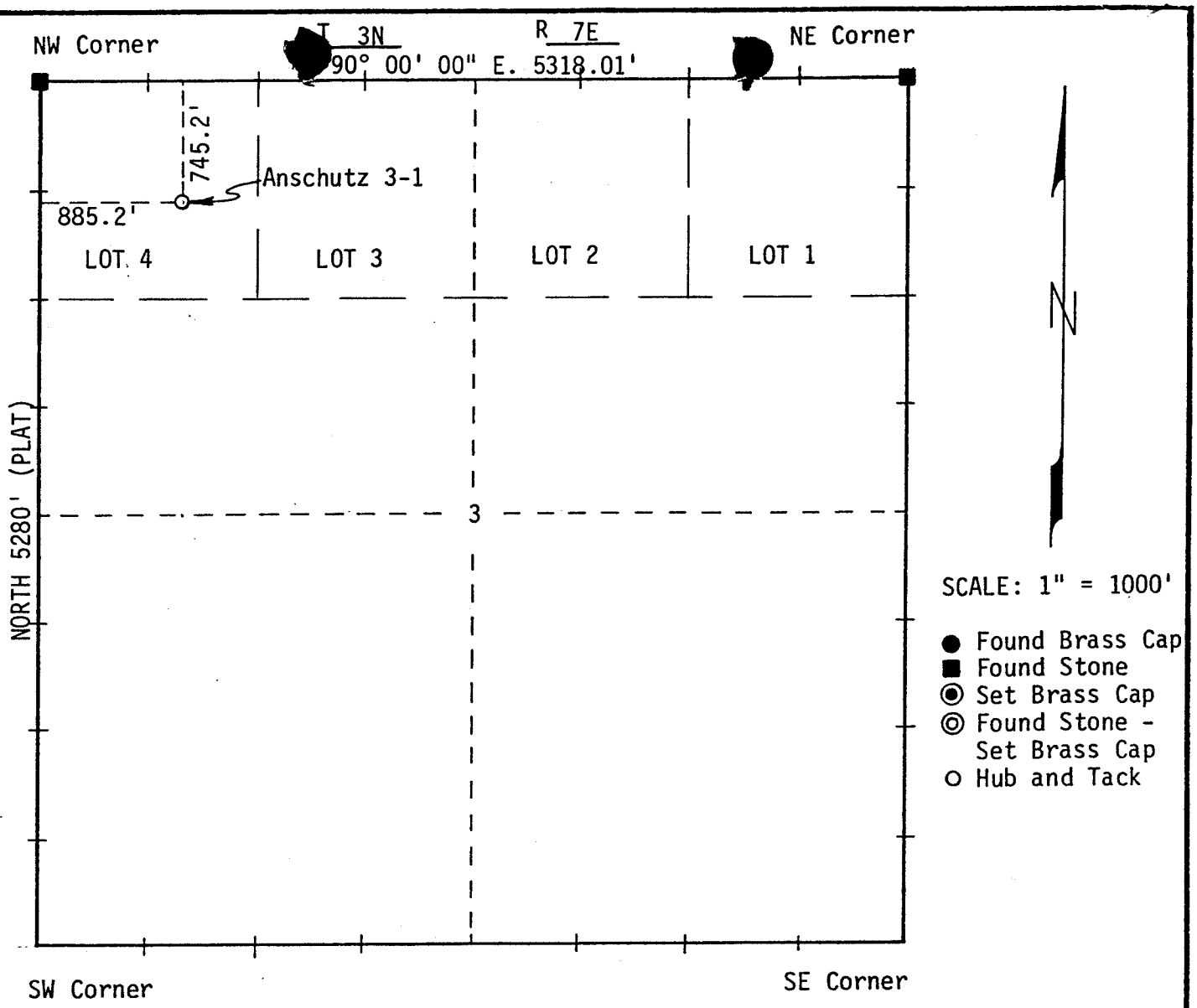
Item 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well.

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 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency offices.

Items 15 and 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

Item 22: Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.



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JOHN A. PROFFIT, UTAH R.L.S. NO. 2860

DATE: June 9, 1977
JOB NO.: 77-101

UINTA ENGINEERING & SURVEYING, INC.
808 MAIN STREET, EVANSTON, WYOMING

THE ANSCHUTZ CORPORATION

1110 DENVER CLUB BUILDING
518 SEVENTEENTH STREET
DENVER, COLORADO 80202
TELEPHONE 303—573-5665

July 15, 1977

Mr. Pat Driscoll
State of Utah
Oil, Gas and Mining Division
1588 West North Temple
Salt Lake City, Utah 84116

RECEIVED
JUL 18 1977

Re: APD-Anschutz Ranch #3-1
Unorthodox Well Location
NW NW Sec. 3-T3N-R7E
Summit County, Utah

Dear Mr. Driscoll:

Pursuant to our telephone conversation this afternoon, the Anschutz Corporation respectfully requests an exception to state-wide rule C-3 with reference to the spacing of the above captioned well and subsequent approval to drill.

The request for exception to rule C-3 is made with reference to C-3 (C) (1) wherein the proposed unorthodox location is due to topographical conditions in the area.

I might add that the ownership of all oil and gas leases within a radius of 660 feet of the proposed location is common with the ownership of the oil and gas leases under the proposed location.

We hope that this request meets with your approval.

Sincerely,

Wayne C. Pierce

Wayne C. Pierce

WCP:kb
cc: PLH, JDH

STATE OF UTAH
DIVISION OF OIL, GAS, AND MINING

** FILE NOTATIONS **

Date: July 25

Operator: Ouschutz Corp.

Well No: 3-1 Ouschutz Ranch

Location: Sec. 3 T. 3N R. 7E County: Summit

API ✓

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

Card Indexed [✓] Completion Sheet [✓]

CHECKED BY:

Administrative Assistant _____

Remarks:

Petroleum Engineer [signature]

Remarks:

Director _____

Remarks:

Legal
Topo.
Excepton

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 [ ]

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

Other:

[✓] Letter Written/~~Approved~~

July 18, 1977

The Anschutz Corporation
1110 Denver Club Building
Denver, Colorado 80202

Re: Well No. Anschutz Ranch #3-1
Sec. 3, T. 3 N, R. 7 E,
Summit 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(c), General Rules and Regulations and Rules of Practice and Procedure.

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

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 rig number and drilling contractor be identified.

The API number assigned to this well is 43-043-30058.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

CLEON B. FEIGHT
Director

cbf/sw

CIRCULATE TO:

Kathy Wells

November 16, 1977

Memo To File:

Re: Anschutz Oil Corp.
Anschutz Ranch 3-1
Sec. 3, T. 3N, R. 7E,
Summit County, Utah

This office was notified on November 15, 1977 that this well spudded in on 11-11-77 and Universal Drilling Company Rig #7 will drill this well.

PATRICK L. DRISCOLL
CHIEF PETROLEUM ENGINEER

PLD/ko

RECEIVED
FEB 17 1978
DIVISION OF OIL,
GAS, & MINING

JOHNSTON

Schlumberger

computerized data analysis

COMPANY THE ANSCHUTZ CORPORATION WELL ANSCHUTZ RANCH #3-1 TEST NO. 2 COUNTY SUMMIT STATE UTAH

F. R. #08795 D

JOHNSTON
Schlumberger

COMPUTERIZED DATA ANALYSIS

FEBRUARY 13, 1978

GENTLEMEN:

THE ENCLOSED TEST APPEARS TO BE A GOOD MECHANICAL DRILL STEM TEST DURING WHICH THE TOOLS DID FUNCTION PROPERLY. THE FORMATION PRODUCED ENOUGH RESERVOIR FLUID FOR PROPER IDENTIFICATION. RESERVOIR PRESSURE DRAWDOWN WAS SUFFICIENT AND AN ADEQUATE FINAL SHUT-IN BUILD-UP DID OCCUR FOR RELIABLE QUANTITATIVE ANALYSIS. COMMUNICATION DURING THE INITIAL SHUT-IN MAKES IS UNRELIABLE FOR ANALYSIS. RESERVOIR PARAMETERS WERE CALCULATED BY THE HORNER METHOD.

1. FLOW RATE: AN AVERAGE FLOW RATE OF 340 MCF/DAY OF GAS WAS NOTED DURING THIS TEST.

2. RESERVOIR PRESSURE: MECHANICAL STABILIZATION OF THE FINAL SHUT-IN PRESSURE BUILD-UP INDICATES A MAXIMUM RESERVOIR PRESSURE OF 2719 P.S.I.G. AT RECORDER DEPTH.

3. PERMEABILITY: THE CALCULATED TRANSMISSIBILITY FACTOR OF 1081.0 MD.-FT./CP. INDICATES AN AVERAGE EFFECTIVE PERMEABILITY TO GAS OF 0.14 MD. FOR THE REPORTED 115 FOOT TEST INTERVAL. THE CALCULATIONS WERE BASED ON A SLOPE OF 80 P.S.I./LOG CYCLE OBTAINED FROM THE FINAL SHUT-IN BUILD-UP PLOT. IT WAS ASSUMED FOR THESE CALCULATIONS: (A) GAS GRAVITY 0.70 (B) VISCOSITY 0.015 CP. (C) AND GAS DEVIATION FACTOR 0.83. THESE FIGURES WERE OBTAINED FROM THE AVAILABLE TECHNICAL LITERATURE.

4. WELL BORE DAMAGE: THE CALCULATED DAMAGE RATIO OF 8.91 INDICATES THAT MAJOR WELL BORE DAMAGE IS PRESENT AT THE TIME AND CONDITIONS OF THIS TEST. THIS VALUE INFERS THAT THE RATE OF PRODUCTION OBSERVED AT THE FORMATION FACE DURING THIS TEST MAY BE INCREASED 8.91 TIMES IF THE WELL BORE DAMAGE ALONE WERE REMOVED.

5. RADIUS OF INVESTIGATION: THE CALCULATED RADIUS OF INVESTIGATION OF THIS TEST IS 26 FEET BASED ON AN ASSUMED POROSITY OF 7%, COMPRESSIBILITY OF 7.04×10^{-4}, AND OTHER ASSUMPTIONS MADE IN NUMBER 3 ABOVE.

6. GENERAL COMMENTS: THE FORMATION EXHIBITS THE CHARACTERISTICS OF RELATIVELY LOW PERMEABILITY EFFECTIVE TO THE RESERVOIR FLUID AND INDICATES THE PRESENCE OF WELL BORE DAMAGE.

Kent Arceneaux
KENT ARCENEAUX
RESERVOIR EVALUATION
DEPARTMENT

THE ANSCHUTZ CORPORATION
ANSCHUTZ RANCH #3-1; SUMMIT COUNTY, UTAH
TEST #2; 6965' TO 7080'
LOCATION: SEC. 34 - 4N - 7E FIELD REPORT # 08795 D

In making any interpretation, our employees will give Customer the benefit of their best judgment as to the correct interpretation. Nevertheless, since all interpretations are opinions based on inferences from electrical, mechanical or other measurements, we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not be liable or responsible, except in the case of gross or wilful negligence on our part, for any loss, costs, damages or expenses incurred or sustained by Customer resulting from any interpretation made by any of our agents or employees.

Gas Reservoir Engineering Data

JOHNSTON

Instrument No. J-1056

Field Report No. 08795 D

Damage Ratio	DR	8.91	Effective Transmissibility GAS	$\frac{Kh}{\mu}$	1081	$\frac{Md\text{-}ft.}{Cp.}$
Maximum Reservoir Pressure FINAL SHUT-IN	P_o	2719 P.S.I.G.	Flow Rate AVERAGE GAS	Q_g	340	MCF/day
Slope of Shut-in Curve FINAL SHUT-IN	M_g	80 PSI/log cycle	Flow Rate	Q	–	
Potentiometric Surface (Datum Plane, Sea Level)	PS	6627 ft.	Pressure Gradient		0.390	PSI/ft.
Radius of Investigation		26 ft.	K (Effective to GAS)		0.14	Md.

SLOPE M_G= 2745 – 2665 = 80

Assumptions made for Calculations for Gas Recoveries

1. Q_g is taken as steady state flow and unless stated otherwise at standard conditions 14.7 P.S.I. and 60°F.
2. P_f is final formation flowing pressure at steady state flow.
3. Formation flow is taken as single phase flow. If liquid (condensate) is produced at surface, condensation is assumed to have occurred in drill pipe.
4. Radial flow is assumed.
5. Unless given, gas specific gravity is assumed to be 0.7 (air 1.0) and having pseudo critical temperature at 385° Rankin and pseudo critical pressure of 666 P.S.I.A.
6. Other standard radial flow, steady state assumptions.

Empirical Equations:

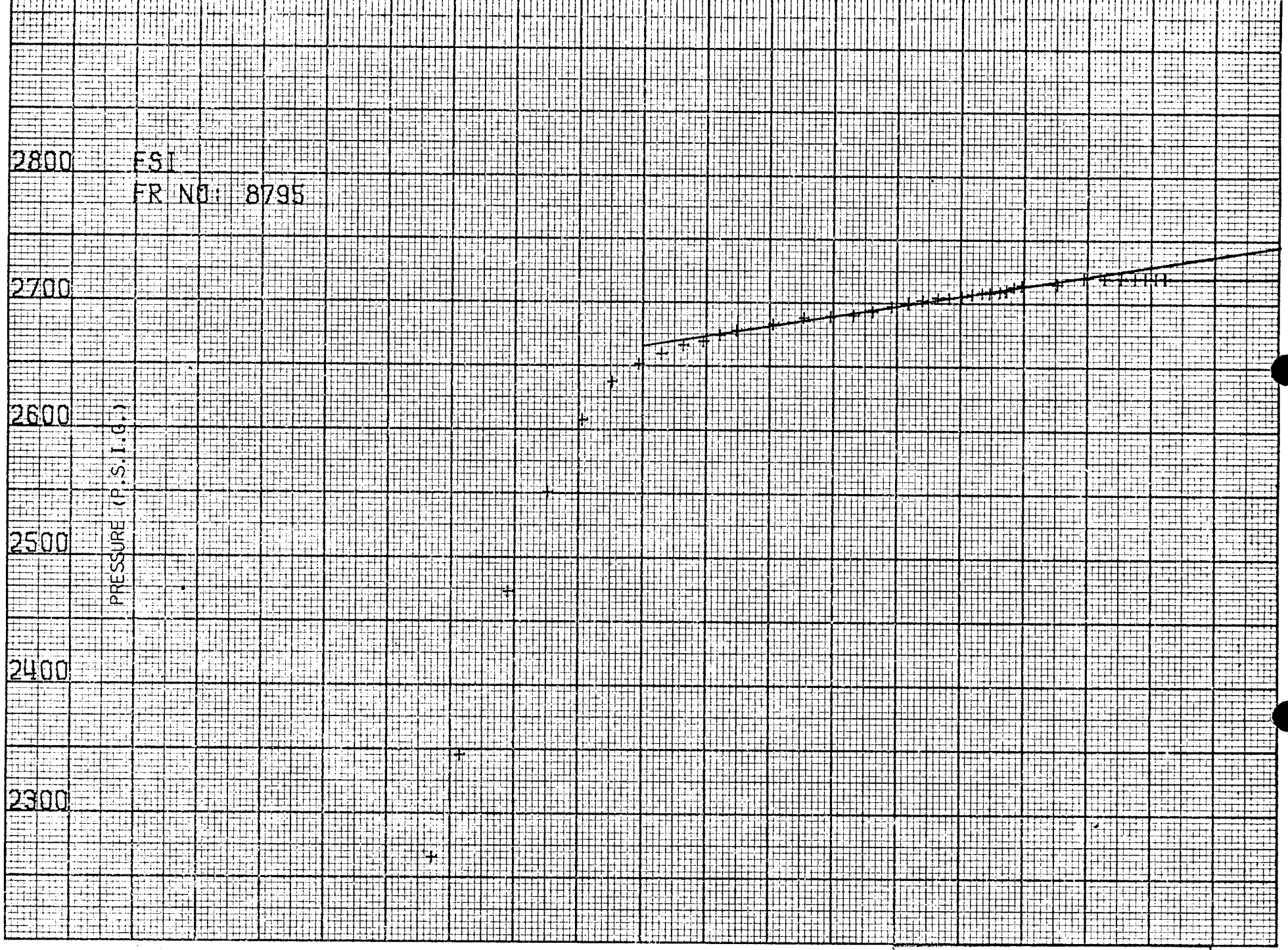
1. $EDR = \frac{P_o^2 - P_f^2}{M_g(\log T + 2.65)}$ where $M_g = \frac{P_1^2 - P_{10}^2}{\text{Log Cycle}}$

2. Transmissibility $\frac{Kh}{\mu Z} = \frac{1637°T_f Q_g}{M_g}$

3. P.S. = $\left[P_o \times 2.309 \text{ ft./PSI}\right] - \left[\text{Recorder depth to sea level.}\right]$

4. Radius of Investigation, $r_i, = \sqrt{\frac{Kt}{40\phi\,(1 - S_w)\mu c}}$ where t = time in days

In making any interpretation, our employees will give Customer the benefit of their best judgment as to the correct interpretation. Nevertheless, since all interpretations are opinions based on inferences from electrical, mechanical or other measurements, we cannot, and do not, guarantee the accuracy or correctness or any interpretations, and we shall not be liable or responsible, except in the case of gross or wilful negligence on our part, for any loss, costs, damages or expenses incurred or sustained by Customer resulting from any interpretation made by any of our agents or employees.



COMPUTERIZED PLOT

JOHNSTON

JOHNSTON
Schlumberger

SURFACE INFORMATION

Description (Rate of Flow)	Time	Pressure (P.S.I.G.)	Surface Choke
Opened Tool			
SEE SUPPLEMENTARY SHEET			

Cushion Type	Amount	Pressure	Bottom Choke
	–		Size 15/16''

MUD DATA

Mud Type L.S.N.D. Wt. 8.9
Viscosity 38 Water Loss 15.6 C.C.
Resist: of Mud 10.0+@ 60 °F; of Filtrate .5 @ 60 °F
Chloride Content 10,650 PPM

EQUIPMENT & HOLE DATA

Type Test M. F. E. OPEN HOLE
Formation Tested TWIN CREEK
Elevation 7222 G.L. Ft.
Net Productive Interval – Ft.
Estimated Porosity – %
All Depths Measured From KELLY BUSHING
Total Depth 7080 Ft.
Main Hole/Casing Size 12 1/4''
Rat Hole/Liner Size –
Drill Collar Length 477' I.D. 3 1/4''
Drill Pipe Length 6454' I.D. 3.826''
Packer Depth(s) 6961 & 6965 Ft.

MULTI-FLOW EVALUATOR FLUID SAMPLE DATA

Sampler Pressure 10 P.S.I.G. at Surface
Recovery: Cu. Ft. Gas –
cc. Oil 100 CONDENSATE
cc. Water –
cc. Mud 400(GAS & WATER CUT)
Tot. Liquid cc. 500
Gravity – °API @ – °F.
Gas/Oil Ratio – cu. ft./bbl.

	RESISTIVITY	CHLORIDE CONTENT
Recovery Water	– @ – °F.	– ppm
Recovery Mud	10+ @ 60 °F.	
Recovery Mud Filtrate	.3 @ 60 °F.	10,000 ppm
Mud Pit Sample	10.0+ @ 60 °F.	
Mud Pit Sample Filtrate	.5 @ 60 °F.	10,650 ppm

RECOVERY DESCRIPTION	FEET	BARRELS	% OIL	% WATER	% OTHERS	API GRAVITY	RESISTIVITY	CHL. PPM
GAS CUT MUD	640	6.79				@ °F.	.3 @ 60 °F.	10,600
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	

Remarks: SLID TOOL 35' TO BOTTOM.

Address 1110 DENVER CLUB BUILDING; DENVER, COLORADO 80202

Company THE ANSCHUTZ CORPORATION Field WILD CAT
Well ANSCHUTZ RANCH #3-1 Location SEC. 34-4N-7E
Test Interval 6965' TO 7080' Test # 2 Date 2-4-78

County SUMMIT State UTAH
Technician JOHNSTON(CASPER) Test Approved By MR. DOUGLAS WEAVER

Field Report No. 08795 D
No. Reports Requested 8XXX

JOHNSTON
Schlumberger

SUPPLEMENTARY SHEET FOR F. R. # 08795 D

SURFACE DATA

DESCRIPTION (RATE OF FLOW)	TIME	PRESSURE (P.S.I.G.)	SURFACE CHOKE
OPENED TOOL	0852	-	-
BLOW, 8'' IN WATER			
BLOW OFF BOTTOM OF BUCKET	0904	-	-
	0915	42	1/4''
CLOSED FOR INITIAL SHUT-IN	0910	-	''
BLED OFF PRESSURE			
GAS TO SURFACE	0930	-	''
FINISHED SHUT-IN	0945	-	''
6' FLARE DURING SHUT-IN			
RE-OPENED TOOL	0950	3	''
	1000	23	''
	1010	52	''
	1020	80	''
	1030	119	''
	1040	144	''
	1050	152	''
	1100	143	11/32''
	1110	123	''
	1120	117	''
	1130	112	''
	1140	107	''
	1150	105	''
	1200	104	''
	1210	106	''
	1220	105	''
GAS, 340 MCF/DAY	1230	106	''
CLOSED FOR FINAL SHUT-IN	1250	106	''
FINISHED SHUT-IN	1900	-	''
PULLED PACKER LOOSE	2150	-	-

JOHNSTON
Schlumberger

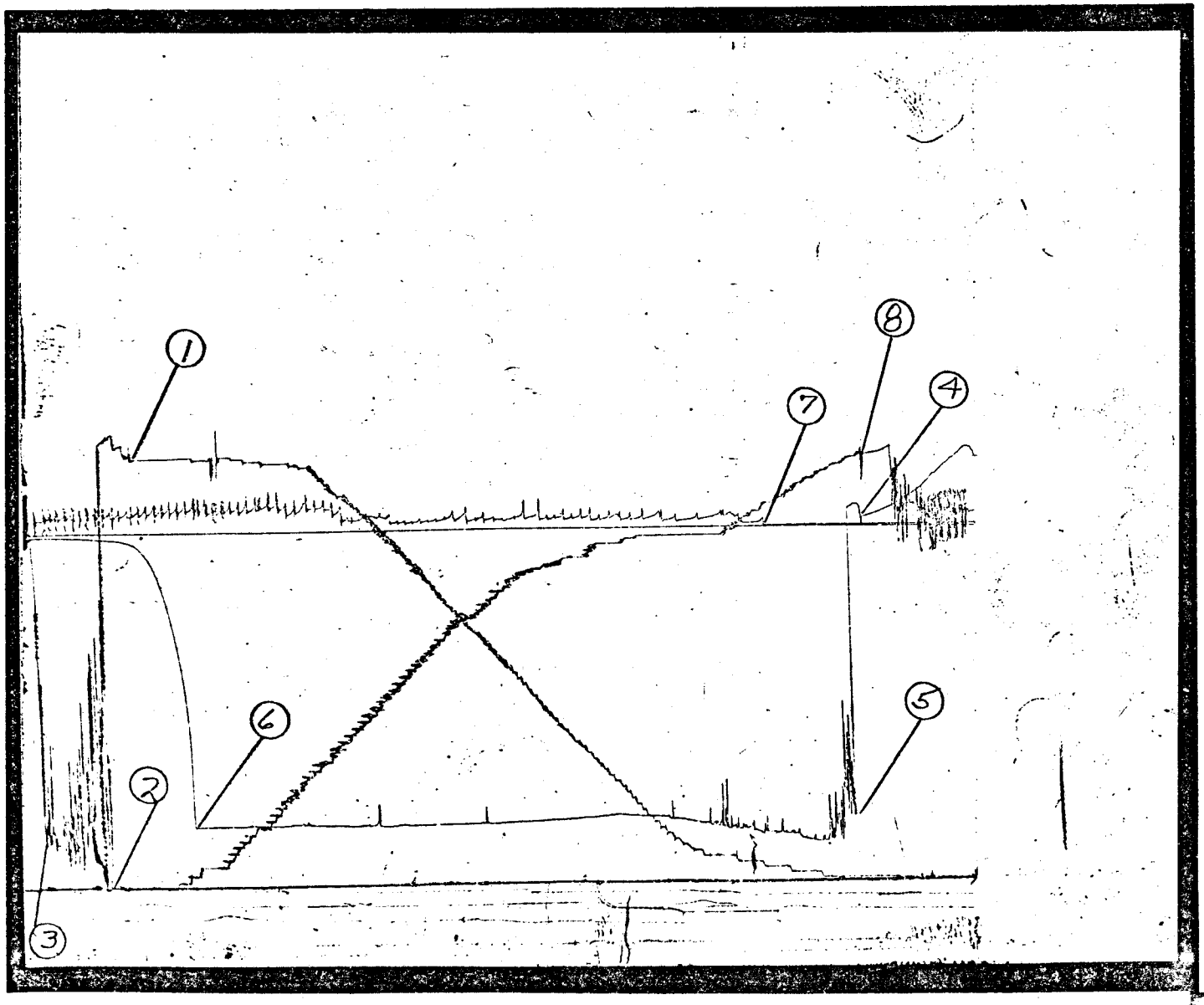
FIELD REPORT NO.: 08795 D

INSTRUMENT NO.: J-1056

CAPACITY: 6400#

NO. OF REPORTS: 8+

PRESSURE DATA FROM THIS CHART IS PRESENTED ON NEXT PAGE



BOTTOM HOLE PRESSURE AND TIME DATA

JOHNSTON Schlumberger

INSTRUMENT NO.: J-1056 CAPACITY(P.S.I.): 6400 DEPTH: 6968 FT.

PORT OPENING: INSIDE BOTTOM HOLE TEMP.: 145

DESCRIPTION	LABELED POINTS	PRESSURE (P.S.I.)	GIVEN TIME	COMPUTED TIME
INITIAL HYDROSTATIC MUD	1	3280.6		
INITIAL FLOW(1)	2	0.0		
INITIAL FLOW(2)	3	363.7	18	18
INITIAL SHUT-IN	4	2772.9	35	36
FINAL FLOW(1)	5	485.6		
FINAL FLOW(2)	6	459.5	180	181
FINAL SHUT-IN	7	2719.3	370	368
FINAL HYDROSTATIC MUD	8	3250.7		

THE INITIAL SHUT-IN IS NOT CONSIDERED A RELIABLE RESERVOIR VALUE DUE TO COMMUNICATIONS. THE CHART INDICATES TOOL PLUGGING DURING THE TEST

INCREMENTAL READINGS

LABEL POINT	DELTA TIME	PRESSURE (P.S.I.)	T + DT/DT	LOG	PW - PF (P.S.I.)	COMMENTS
1		3280.6				HYDROSTATIC MUD
2	0	0.0				INITIAL FLOW(1)
3	18	363.7				INITIAL FLOW(2)
3	0	363.7				STARTED SHUT-IN
4	36	2772.9	1.500	0.176	2409.2	INITIAL SHUT-IN
5	0	485.6				FINAL FLOW(1)
	20	372.4				
	40	439.6				
	60	514.3				
	80	490.6				
	100	469.5				
	120	459.5				
	140	460.8				
	160	460.8				
	180	460.8				
6	181	459.5				FINAL FLOW(2)
6	0	459.5				STARTED SHUT-IN
	1	958.5	182.000	2.260	499.0	
	2	1305.7	91.500	1.961	846.2	
	3	1528.5	61.333	1.788	1068.9	
	4	1697.7	46.250	1.665	1238.2	
	5	1837.1	37.200	1.571	1377.6	
	6	1965.2	31.167	1.494	1505.7	
	7	2077.2	26.857	1.429	1617.7	
	8	2178.0	23.625	1.373	1718.5	
	9	2265.1	21.111	1.325	1805.6	
	10	2343.5	19.100	1.281	1884.0	
	12	2470.5	16.083	1.206	2011.0	
	14	2548.9	13.929	1.144	2089.3	
	16	2606.1	12.313	1.090	2146.6	
	18	2636.0	11.056	1.044	2176.5	
	20	2649.7	10.050	1.002	2190.1	

LABEL POINT	DELTA TIME	PRESSURE (P.S.I.)	T + DT/DT	LOG	PW - PF (P.S.I.)	COMMENTS
	22	2658.4	9.227	0.965	2198.9	
	24	2664.6	8.542	0.932	2205.1	
	26	2668.3	7.962	0.901	2208.8	
	28	2673.3	7.464	0.873	2213.8	
	30	2677.0	7.033	0.847	2217.5	
	35	2682.0	6.171	0.790	2222.5	
	40	2687.0	5.525	0.742	2227.5	
	45	2688.2	5.022	0.701	2228.7	
	50	2689.5	4.620	0.665	2230.0	
	55	2692.0	4.291	0.633	2232.5	
	60	2695.7	4.017	0.604	2236.2	
	65	2699.4	3.785	0.578	2239.9	
	70	2700.7	3.586	0.555	2241.2	
	75	2703.2	3.413	0.533	2243.7	
	80	2703.2	3.262	0.514	2243.7	
	85	2704.4	3.129	0.495	2244.9	
	90	2705.7	3.011	0.479	2246.1	
	95	2706.9	2.905	0.463	2247.4	
	100	2706.9	2.810	0.449	2247.4	
	105	2708.1	2.724	0.435	2248.6	
	110	2709.4	2.645	0.423	2249.9	
	115	2711.9	2.574	0.411	2252.4	
	120	2713.1	2.508	0.399	2253.6	
	150	2714.4	2.207	0.344	2254.9	
	180	2719.3	2.006	0.302	2259.8	
	210	2719.3	1.862	0.270	2259.8	
	240	2719.3	1.754	0.244	2259.8	
	270	2719.3	1.670	0.223	2259.8	
	300	2719.3	1.603	0.205	2259.8	
	330	2719.3	1.548	0.190	2259.8	
	360	2719.3	1.503	0.177	2259.8	
7	368	2719.3	1.492	0.174	2259.8	FINAL SHUT-IN
8		3250.7				HYDROSTATIC MUD

JOHNSTON Schlumberger

BOTTOM HOLE PRESSURE AND TIME DATA

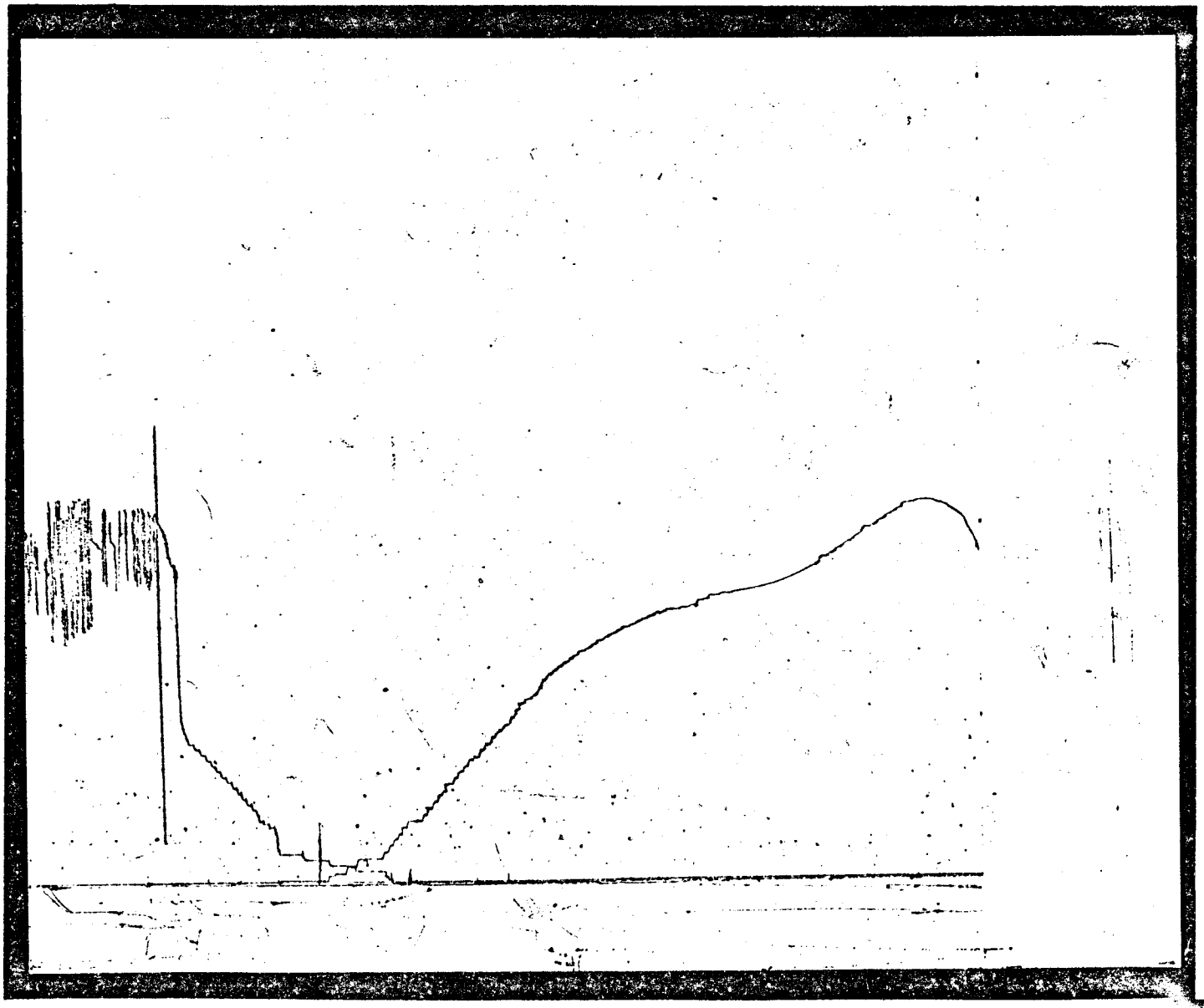
INSTRUMENT NO.: J-100 CAPACITY (P.S.I.): 6400# DEPTH 7077 FT.

PORT OPENING: OUTSIDE BOTTOM HOLE TEMP.: 145°F. FIELD REPORT NO. 08795 D

DESCRIPTION	LABELED POINTS	PRESSURE (P.S.I.)	GIVEN TIME	COMPUTED TIME
INITIAL HYDROSTATIC MUD				
INITIAL FLOW (1)				
INITIAL FLOW (2)				
INITIAL SHUT-IN				
SECOND FLOW (1)				
SECOND FLOW (2)				
SECOND SHUT-IN				
FINAL FLOW (1)				
FINAL FLOW (2)				
FINAL SHUT-IN				
FINAL HYDROSTATIC MUD				

REMARKS: CLOCK STOPPED, NO PRESSURES RECORDED.

8+



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Schlumberger

technical report

COMPANY THE ANSCHUTZ CORPORATION

WELL ANSCHUTZ RANCH #3-1

TEST NO. 5

COUNTY SUMMIT

STATE UTAH

F. R. # 09612 D

JOHNSTON
Schlumberger

SURFACE INFORMATION

Description (Rate of Flow)	Time	Pressure (P.S.I.G.)	Surface Choke
Opened Tool	0343	–	1/8''
TOOL SLID			
RE-SET & RE-CYCLED TOOL	0345	–	''
RE-OPENED TOOL	0357	–	''
BLOW, 1/8'' IN WATER			
CLOSED FOR INITIAL SHUT-IN	0402	–	''
FINISHED SHUT-IN	0433	–	''
RE-OPENED TOOL	0435	–	''
NO BLOW			
SLIGHT PUFF, THEN DIED	0448	–	''
CLOSED FOR FINAL SHUT-IN	0744	–	''
FINISHED SHUT-IN	1044	–	''
PULLED PACKER LOOSE	1059	–	–

Cushion Type	Amount	Pressure	Bottom Choke
	–		Size 15/16''

MUD DATA

Mud Type L.S.N.D. Wt. 9.0
Viscosity 40 Water Loss 8.8 C.C.
Resist: of Mud .26 @ 73 °F; of Filtrate .20 @ 75 °F
Chloride Content 26,000 PPM

EQUIPMENT & HOLE DATA

Type Test M. F. E. OPEN HOLE
Formation Tested TWIN CREEK
Elevation 7222 G.L. Ft.
Net Productive Interval – Ft.
Estimated Porosity – %
All Depths Measured From KELLY BUSHING
Total Depth 7407 Ft.
Main Hole/Casing Size 12 1/4''
Rat Hole/Liner Size –
Drill Collar Length 355' I.D. 3''
Drill Pipe Length 6841' I.D. 3.8''
Packer Depth(s) 7226 & 7232 Ft.

MULTI-FLOW EVALUATOR FLUID SAMPLE DATA

Sampler Pressure 10 P.S.I.G. at Surface
Recovery: Cu. Ft. Gas –
cc. Oil –
cc. Water –
cc. Mud 2400
Tot. Liquid cc. 2400
Gravity – °API @ – °F.
Gas/Oil Ratio – cu. ft./bbl.

	RESISTIVITY		CHLORIDE CONTENT
Recovery Water	– @ – °F.		– ppm
Recovery Mud	.33 @ 55 °F.		
Recovery Mud Filtrate	.31 @ 56 °F.		25000 ppm
Mud Pit Sample	.26 @ 73 °F.		
Mud Pit Sample Filtrate	.20 @ 75 °F.		26000 ppm

RECOVERY DESCRIPTION	FEET	BARRELS	% OIL	% WATER	% OTHERS	API GRAVITY	RESISTIVITY	CHL. PPM
MUD	90	.78				@ °F.	.32 @ 56 °F.	25000
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	

Remarks: TOOL SLID 4' TO BOTTOM. LOST 1 FOOT OF MUD PER HOUR.

Address 1110 DENVER CLUB BUILDING; DENVER, COLORADO 80202

Company THE ANSCHUTZ CORPORATION Field WILD CAT
Well ANSCHUTZ RANCH #3-1 Location SEC. 34 – T4N – R7E
Test Interval 7232' TO 7407' Test # 5 Date 2-10-78

County SUMMIT State UTAH
Technician SIMPER(ROCK SPRINGS) Test Approved By MR. DOUGLAS WEAVER

Field Report No. 09612 D
No. Reports Requested 8XXX

JOHNSTON Schlumberger

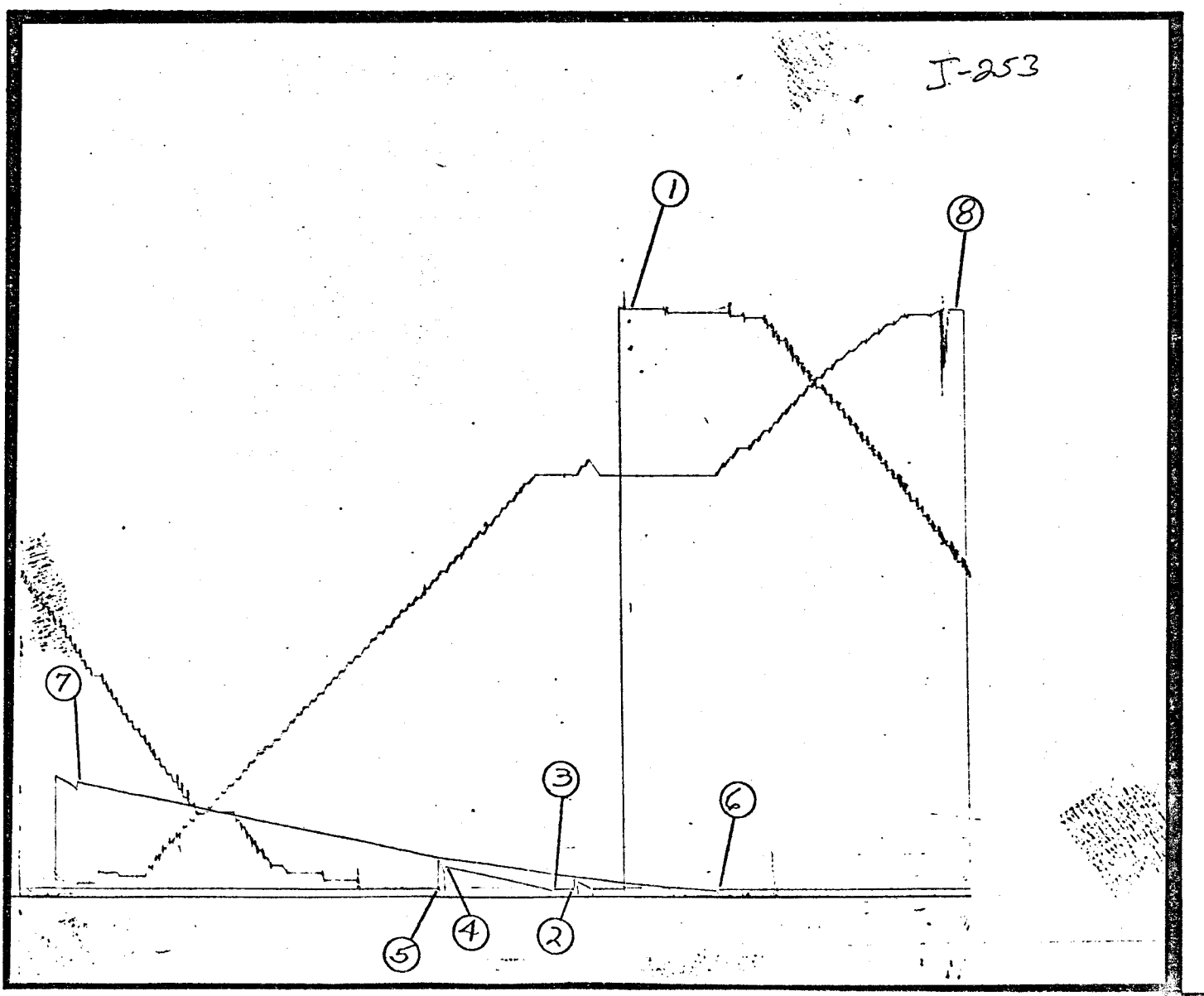
FIELD REPORT NO.: 09612 D

INSTRUMENT NO.: J-253

CAPACITY: 4700#

NO. OF REPORTS: 8+

PRESSURE DATA FROM THIS CHART IS PRESENTED ON NEXT PAGE



BOTTOM HOLE PRESSURE AND TIME DATA

JOHNSTON Schlumberger

INSTRUMENT NO.: J-253 CAPACITY(P.S.I.): 4700 DEPTH: 7237 FT.

PORT OPENING: INSIDE BOTTOM HOLE TEMP.: 137

DESCRIPTION	LABELED POINTS	PRESSURE (P.S.I.)	GIVEN TIME	COMPUTED TIME
INITIAL HYDROSTATIC MUD	1	3428.6		
INITIAL FLOW(1)	2	43.3		
INITIAL FLOW(2)	3	43.3	5	5
INITIAL SHUT-IN	4	174.9	31	31
FINAL FLOW(1)	5	45.2		
FINAL FLOW(2)	6	46.1	189	188
FINAL SHUT-IN	7	670.4	180	180
FINAL HYDROSTATIC MUD	8	3423.9		

INCREMENTAL READINGS

LABEL POINT	DELTA TIME	PRESSURE (P.S.I.)	T + DT/DT	LOG	PW - PF (P.S.I.)	COMMENTS
1		3428.6				HYDROSTATIC MUD
2	0	43.3				INITIAL FLOW(1)
3	5	43.3				INITIAL FLOW(2)
3	0	43.3				STARTED SHUT-IN
	3	47.1	2.667	0.426	3.8	
	6	62.1	1.833	0.263	18.8	
	9	78.1	1.556	0.192	34.8	
	12	92.2	1.417	0.151	48.9	
	15	106.3	1.333	0.125	63.0	
	18	119.5	1.278	0.106	76.1	
	21	133.6	1.238	0.093	90.2	
	24	145.8	1.208	0.082	102.5	
	27	158.0	1.185	0.074	114.7	
	30	172.1	1.167	0.067	128.8	
4	31	174.9	1.161	0.065	131.6	INITIAL SHUT-IN
5	0	45.2				FINAL FLOW(1)
	10	45.2				
	20	46.1				
	30	47.1				
	40	48.0				
	50	48.9				
	60	49.9				
	70	50.8				
	80	50.8				
	90	49.9				
	100	49.9				
	110	48.9				
	120	48.9				
	130	48.0				
	140	46.1				
	150	46.1				
	160	46.1				
	170	46.1				
	180	46.1				
6	188	46.1				FINAL FLOW(2)

FIELD REPORT NO. 09612D

LABEL POINT	DELTA TIME	PRESSURE (P.S.I.)	T + DT/DT	LOG	PW - PF (P.S.I.)	COMMENTS
6	0	46.1				STARTED SHUT-IN
	1	38.6	194.000	2.288	-7.5	
	2	40.5	97.500	1.989	-5.6	
	3	41.4	65.333	1.815	-4.7	
	4	43.3	49.250	1.692	-2.8	
	5	45.2	39.600	1.598	-0.9	
	6	46.1	33.167	1.521	0.	
	7	48.0	28.571	1.456	1.9	
	8	48.9	25.125	1.400	2.8	
	9	50.8	22.444	1.351	4.7	
	10	52.7	20.300	1.307	6.6	
	12	55.5	17.083	1.233	9.4	
	14	59.3	14.786	1.170	13.2	
	16	62.1	13.063	1.116	16.0	
	18	66.8	11.722	1.069	20.7	
	20	69.6	10.650	1.027	23.5	
	22	73.4	9.773	0.990	27.3	
	24	76.2	9.042	0.956	30.1	
	26	80.9	8.423	0.925	34.8	
	28	84.7	7.893	0.897	38.5	
	30	89.4	7.433	0.871	43.2	
	40	114.8	5.825	0.765	68.6	
	50	143.9	4.860	0.687	97.8	
	60	175.9	4.217	0.625	129.7	
	70	204.1	3.757	0.575	157.9	
	80	232.3	3.412	0.533	186.1	
	90	276.4	3.144	0.498	230.3	
	100	325.3	2.930	0.467	279.2	
	110	367.6	2.755	0.440	321.5	
	120	409.9	2.608	0.416	363.8	
	130	451.3	2.485	0.395	405.2	
	140	496.4	2.379	0.376	450.3	
	150	542.5	2.287	0.359	496.4	
	160	584.8	2.206	0.344	538.7	
	170	625.2	2.135	0.329	579.1	
7	180	670.4	2.072	0.316	624.2	FINAL SHUT-IN
8		3423.9				HYDROSTATIC MUD

JOHNSTON Schlumberger

BOTTOM HOLE PRESSURE AND TIME DATA

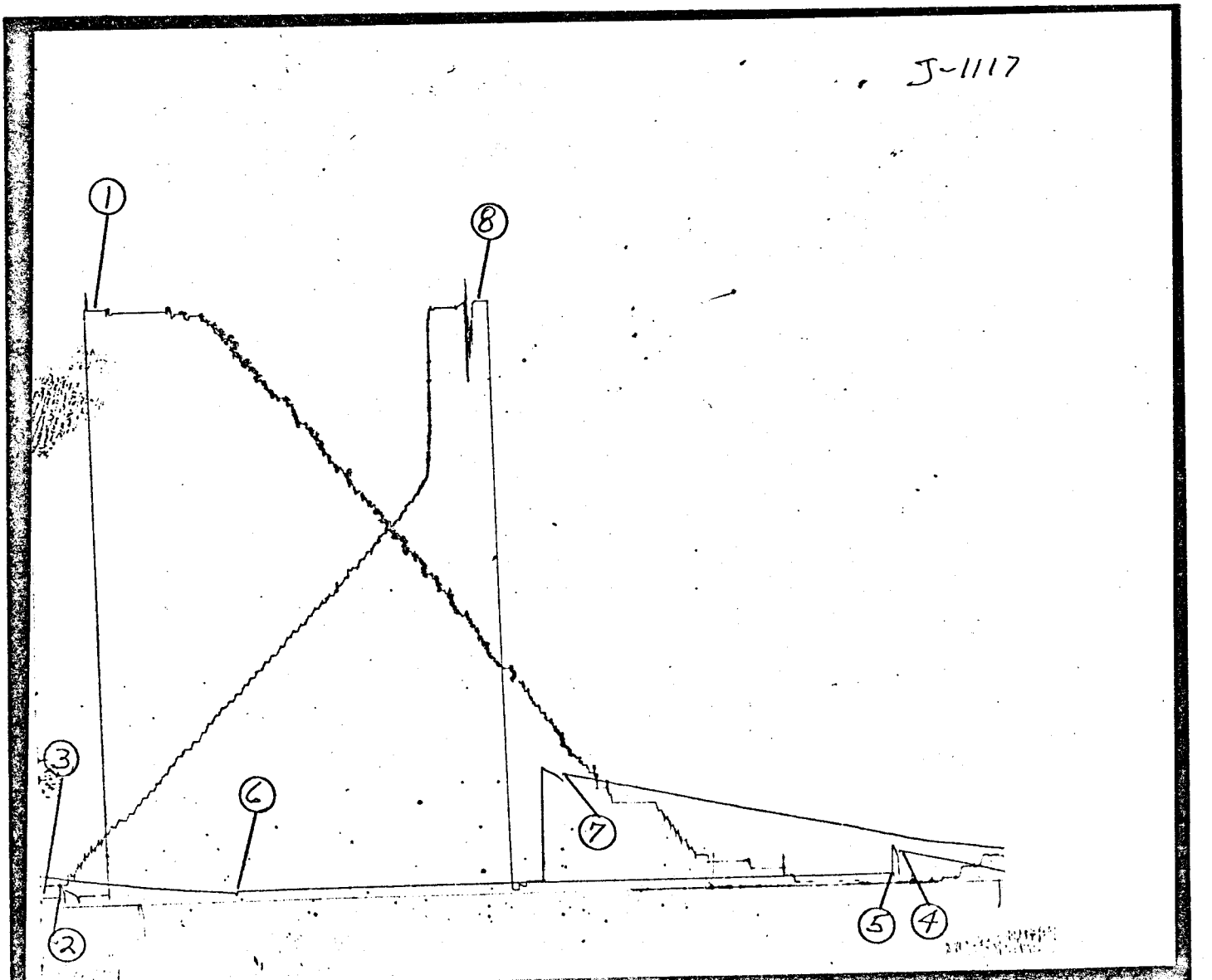
INSTRUMENT NO.: J-1117 CAPACITY (P.S.I.): 4700# DEPTH 7243 FT.

PORT OPENING: OUTSIDE BOTTOM HOLE TEMP.: 137° F. FIELD REPORT NO. 09612 D

DESCRIPTION	LABELED POINTS	PRESSURE (P.S.I.)	GIVEN TIME	COMPUTED TIME
INITIAL HYDROSTATIC MUD	1	3445.4		
INITIAL FLOW (1)	2	57.2		
INITIAL FLOW (2)	3	57.2	5	5
INITIAL SHUT-IN	4	184.4	31	31
SECOND FLOW (1)				
SECOND FLOW (2)				
SECOND SHUT-IN				
FINAL FLOW (1)	5	55.3		
FINAL FLOW (2)	6	64.7	189	188
FINAL SHUT-IN	7	686.6	180	180
FINAL HYDROSTATIC MUD	8	3438.9		

REMARKS:

8+



JOHNSTON

Schlumberger

technical report

F. R. #09611 D

COMPANY THE ANSCHUTZ CORP. WELL ANSCHUTZ RANCH #3-1 TEST NO. 4 COUNTY SUMMIT STATE UTAH

JOHNSTON
Schlumberger

SURFACE INFORMATION

Description (Rate of Flow)	Time	Pressure (P.S.I.G.)	Surface Choke
Opened Tool	1638	-	1/8"
MUD DROPPED IN ANNULUS			
RE-SET TWICE, MUD			
DROPPED EACH TIME			

Cushion Type	Amount	Pressure	Bottom Choke
	-		Size 15/16"

MUD DATA

Mud Type L.S.N.D. Wt. 8.9
Viscosity 40 Water Loss 8.8 C.C.
Resist: of Mud .26 @ 73 °F; of Filtrate .20 @ 75 °F
Chloride Content 26,000 PPM

EQUIPMENT & HOLE DATA

Type Test M.F.E. OPEN HOLE
Formation Tested -
Elevation 7222 G.L. Ft.
Net Productive Interval - Ft.
Estimated Porosity - %
All Depths Measured From KELLY BUSHING
Total Depth 7407 Ft.
Main Hole/Casing Size $12\frac{1}{4}$"
Rat Hole/Liner Size -
Drill Collar Length 355' I.D. 3.0"
Drill Pipe Length 6791' I.D. 3.8"
Packer Depth(s) 7196 & 7200 Ft.

MULTI-FLOW EVALUATOR FLUID SAMPLE DATA

Sampler Pressure _____ P.S.I.G. at Surface
Recovery: Cu. Ft. Gas _____
cc. Oil _____
cc. Water _____
cc. Mud _____
Tot. Liquid cc. _____
Gravity _____ °API @ _____ °F.
Gas/Oil Ratio _____ cu. ft./bbl.

	RESISTIVITY	CHLORIDE CONTENT
Recovery Water	@ °F.	ppm
Recovery Mud	@ °F.	
Recovery Mud Filtrate	@ °F.	ppm
Mud Pit Sample	@ °F.	
Mud Pit Sample Filtrate	@ °F.	ppm

RECOVERY DESCRIPTION	FEET	BARRELS	% OIL	% WATER	% OTHERS	API GRAVITY	RESISTIVITY	CHL. PPM
-						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	

Remarks: UNSUCCESSFUL TEST, PACKER SEAT FAILURE.

Address 1110 DENVER CLUB BUILDING; DENVER, COLORADO 80202

Company THE ANSCHUTZ CORPORATION Field WILD CAT
Well ANSCHUTZ RANCH #3-1 Location SEC. 34, T-4N, R-7E
Test Interval 7200' TO 7407' (UNSUCCESSFUL) Test # 4 Date 2-9-78

County SUMMIT State UTAH
Technician SIMPER (ROCK SPRINGS) Test Approved By MR. DOUGLAS WEAVER

Field Report No. 09611 D
No. Reports Requested 8 (3x)

JOHNSTON Schlumberger

BOTTOM HOLE PRESSURE AND TIME DATA

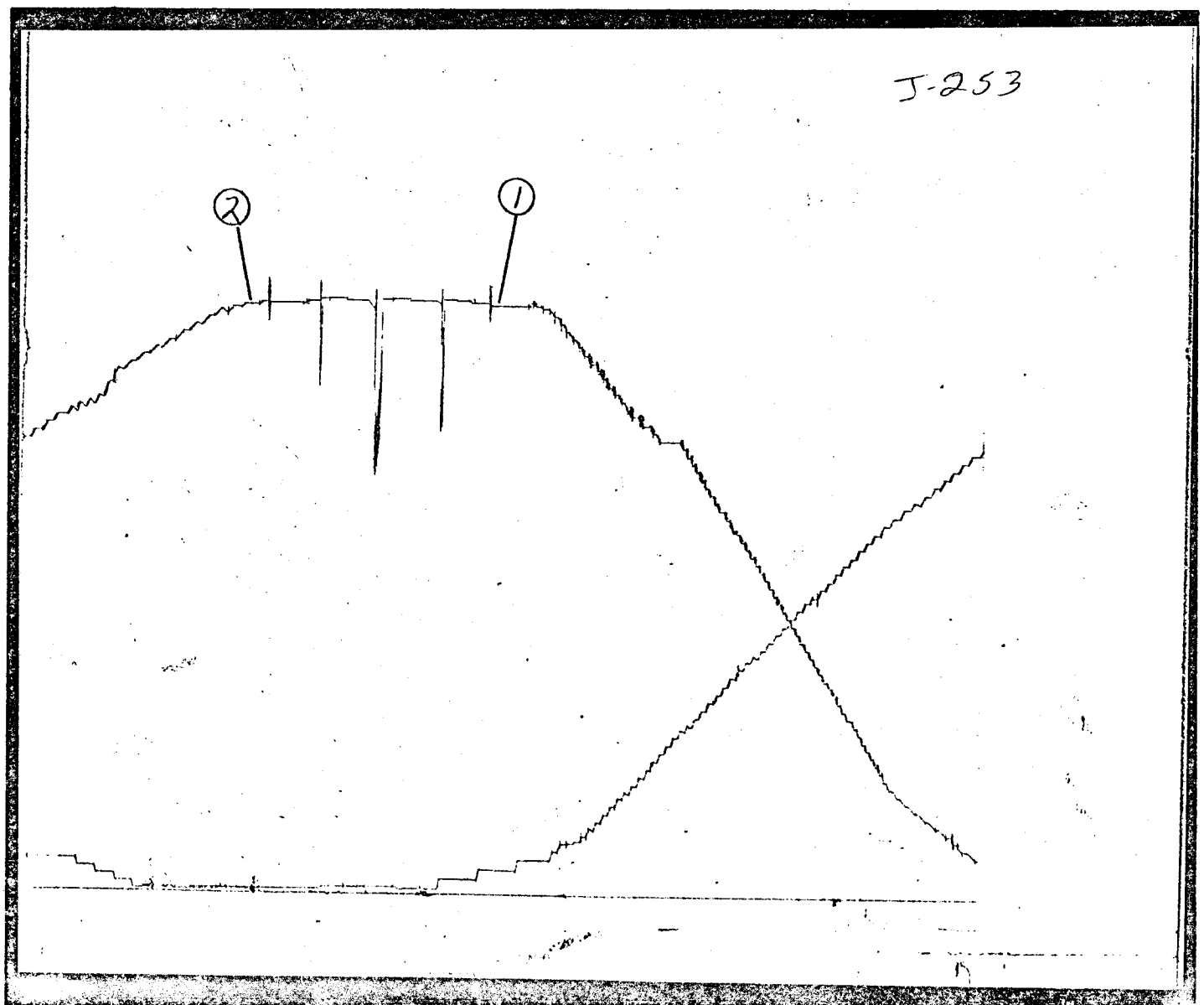
INSTRUMENT NO.: J-253 CAPACITY (P.S.I.): 4700# DEPTH 7205 FT.

PORT OPENING: INSIDE BOTTOM HOLE TEMP.: READ AT 150°F. FIELD REPORT NO. 09611 D

DESCRIPTION	LABELED POINTS	PRESSURE (P.S.I.)	GIVEN TIME	COMPUTED TIME
INITIAL HYDROSTATIC MUD	1	3380.2		
INITIAL FLOW (1)				
INITIAL FLOW (2)				
INITIAL SHUT-IN				
SECOND FLOW (1)				
SECOND FLOW (2)				
SECOND SHUT-IN				
FINAL FLOW (1)				
FINAL FLOW (2)				
FINAL SHUT-IN				
FINAL HYDROSTATIC MUD	2	3380.2		

REMARKS: UNSUCCESSFUL TEST.

8+



JOHNSTON Schlumberger

BOTTOM HOLE PRESSURE AND TIME DATA

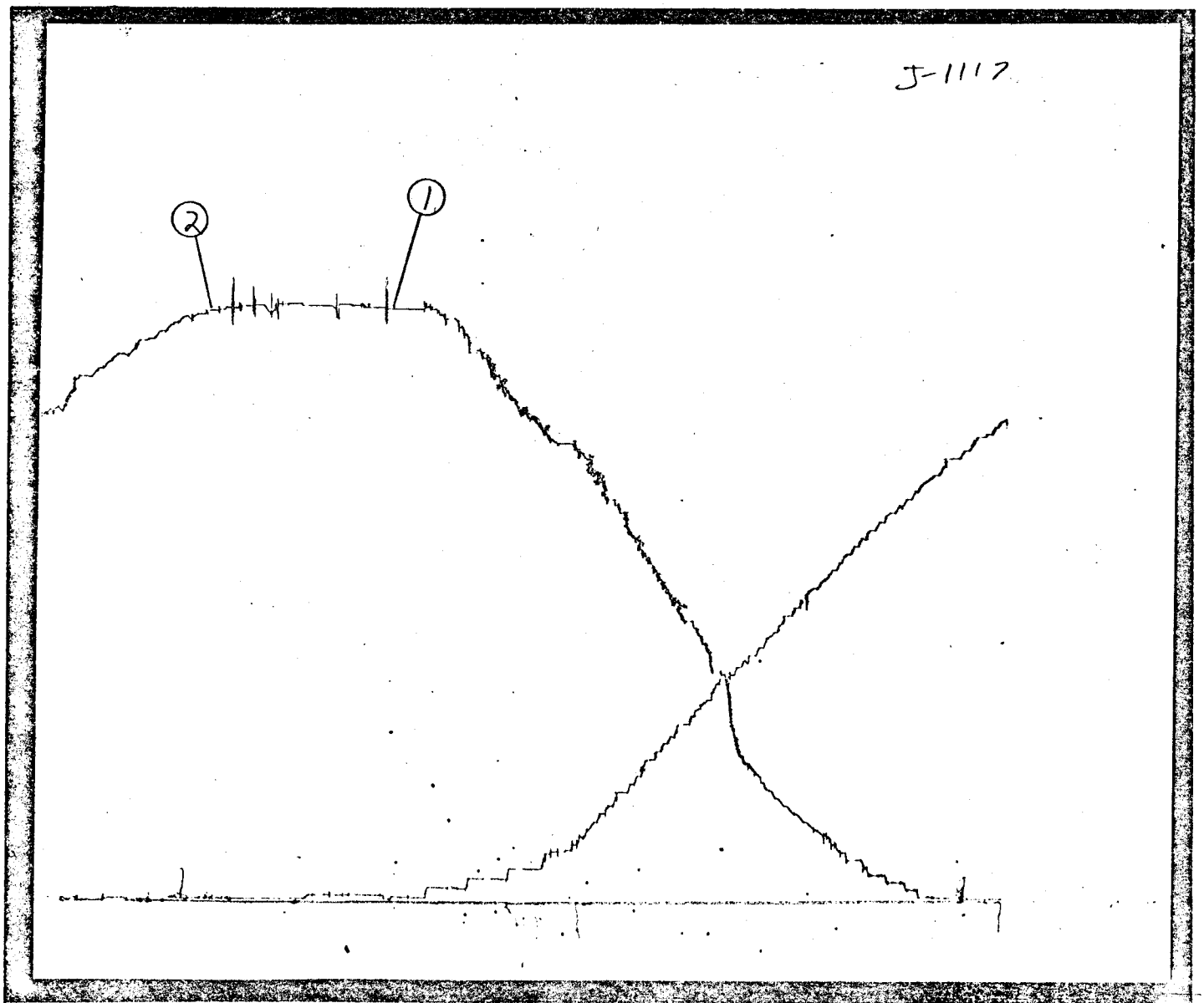
INSTRUMENT NO.: J-1117 CAPACITY (P.S.I.): 4700# DEPTH 7211 FT.

PORT OPENING: OUTSIDE BOTTOM HOLE TEMP.: READ AT 150°F. FIELD REPORT NO. 09611 D

DESCRIPTION	LABELED POINTS	PRESSURE (P.S.I.)	GIVEN TIME	COMPUTED TIME
INITIAL HYDROSTATIC MUD	1	3386.2		
INITIAL FLOW (1)				
INITIAL FLOW (2)				
INITIAL SHUT-IN				
SECOND FLOW (1)				
SECOND FLOW (2)				
SECOND SHUT-IN				
FINAL FLOW (1)				
FINAL FLOW (2)				
FINAL SHUT-IN				
FINAL HYDROSTATIC MUD	2	3375.9		

REMARKS: UNSUCCESSFUL TEST.

8+



JOHNSTON

Schlumberger

technical report

F. R. #09591 D

COMPANY THE ANSCHUTZ CORP. WELL ANSCHUTZ RANCH #3-1 TEST NO. 3 COUNTY SUMMIT STATE UTAH

JOHNSTON
Schlumberger

SURFACE INFORMATION

Description (Rate of Flow)	Time	Pressure (P.S.I.G.)	Surface Choke
Opened Tool	0424	-	1/8"
RIPPLE - DIED IMMEDIATELY			
CLOSED FOR INITIAL SHUT-IN	0429	-	"
FINISHED SHUT-IN	0432	-	"
RE-OPENED TOOL	0434	-	"
NO BLOW	0435	-	"
CLOSED FOR SECOND SHUT-IN	0438	-	"
FINISHED SHUT-IN	0508	-	"
RE-OPENED TOOL	0510	-	"
NO BLOW			
CLOSED FOR FINAL SHUT-IN	0640	-	"
FINISHED SHUT-IN	0940	-	"
PULLED PACKER LOOSE	0942	-	-

Cushion Type	Amount	Pressure	Bottom Choke
	-		Size 15/16"

MUD DATA

Mud Type L.S.N.D. Wt. 9.0
Viscosity 39 Water Loss 13.6 C.C.
Resist: of Mud 4.6 @ 45 °F; of Filtrate 3.8 @ 45 °F
Chloride Content 18,000 PPM

EQUIPMENT & HOLE DATA

Type Test M.F.E. OPEN HOLE
Formation Tested TWIN CREEK
Elevation 7222 G.L. Ft.
Net Productive Interval - Ft.
Estimated Porosity - %
All Depths Measured From KELLY BUSHING
Total Depth 7200 Ft.
Main Hole/Casing Size $12\frac{1}{4}$"
Rat Hole/Liner Size -
Drill Collar Length 395' I.D. 2.4"
Drill Pipe Length 6624' I.D. 3.5"
Packer Depth(s) 7061 & 7065 Ft.

MULTI-FLOW EVALUATOR FLUID SAMPLE DATA

Sampler Pressure 10 P.S.I.G. at Surface
Recovery: Cu. Ft. Gas -
cc. Oil -
cc. Water -
cc. Mud 1900
Tot. Liquid cc. 1900
Gravity - °API @ - °F.
Gas/Oil Ratio - cu. ft./bbl.

	RESISTIVITY	CHLORIDE CONTENT
Recovery Water	- @ - °F.	- ppm
Recovery Mud	3.7 @ 65 °F.	
Recovery Mud Filtrate	3.1 @ 65 °F.	17,000 ppm
Mud Pit Sample	4.6 @ 45 °F.	
Mud Pit Sample Filtrate	3.8 @ 45 °F.	18,000 ppm

RECOVERY DESCRIPTION	FEET	BARRELS	% OIL	% WATER	% OTHERS	API GRAVITY	RESISTIVITY	CHL. PPM
DRILLING MUD	60	.35				@ °F.	3.2@ 65 °F.	18,000
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	

Remarks:

Address 1110 DENVER CLUB BUILDING; DENVER, COLORADO 80202

Company THE ANSCHUTZ CORPORATION Field WILD CAT
Well ANSCHUTZ RANCH #3-1 Location SEC. 34, 4N, 7E
Test Interval 7065' TO 7200' Test # 3 Date 2-7-78

County SUMMIT State UTAH Field Report No. 09591 D
Technician WHEELER (ROCK SPRINGS) Test Approved By MR. DOUGLAS WEAVER No. Reports Requested 8XXX

JOHNSTON

PRESSURE LOG*

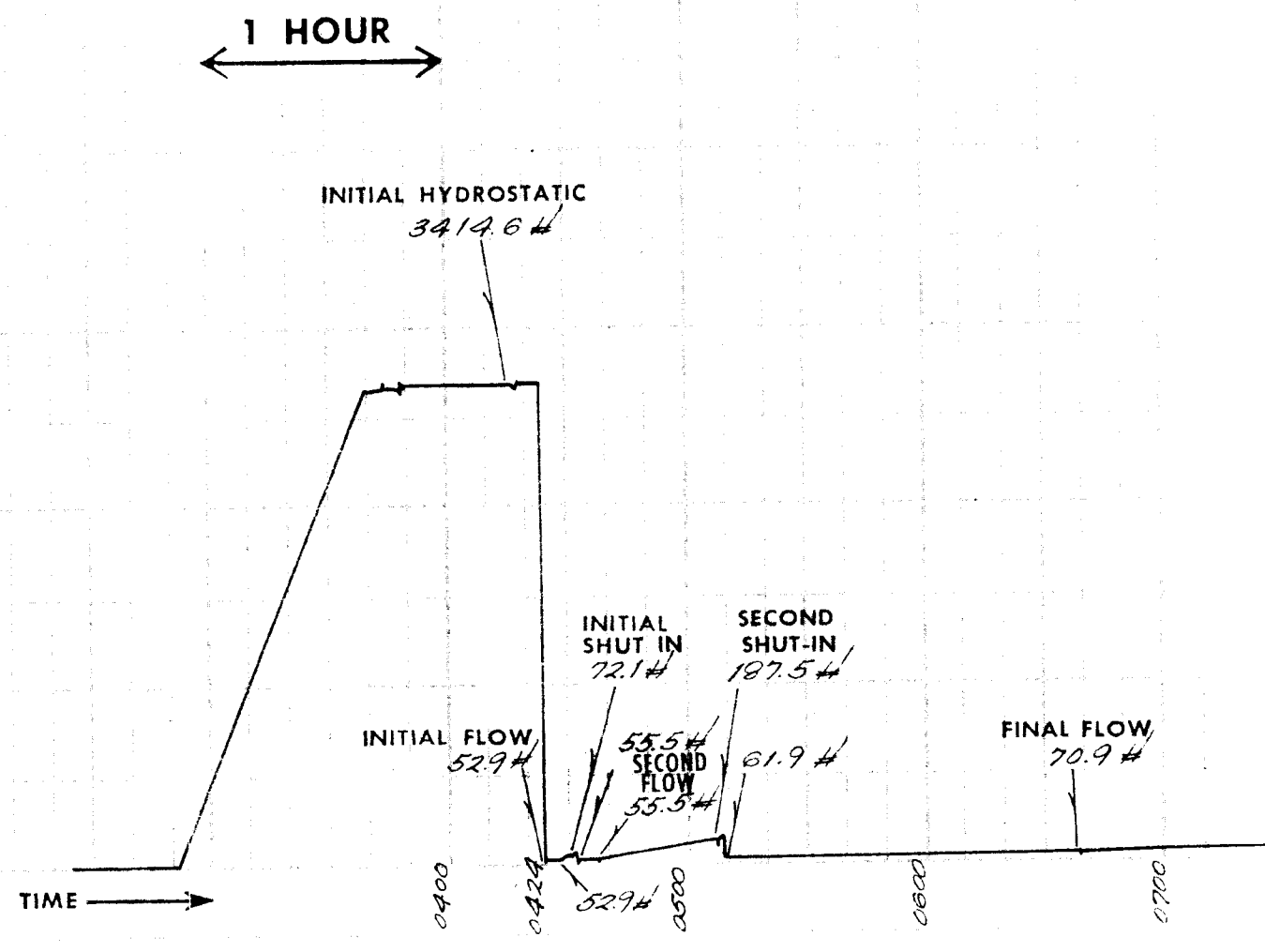
Field Report No. 09591 D

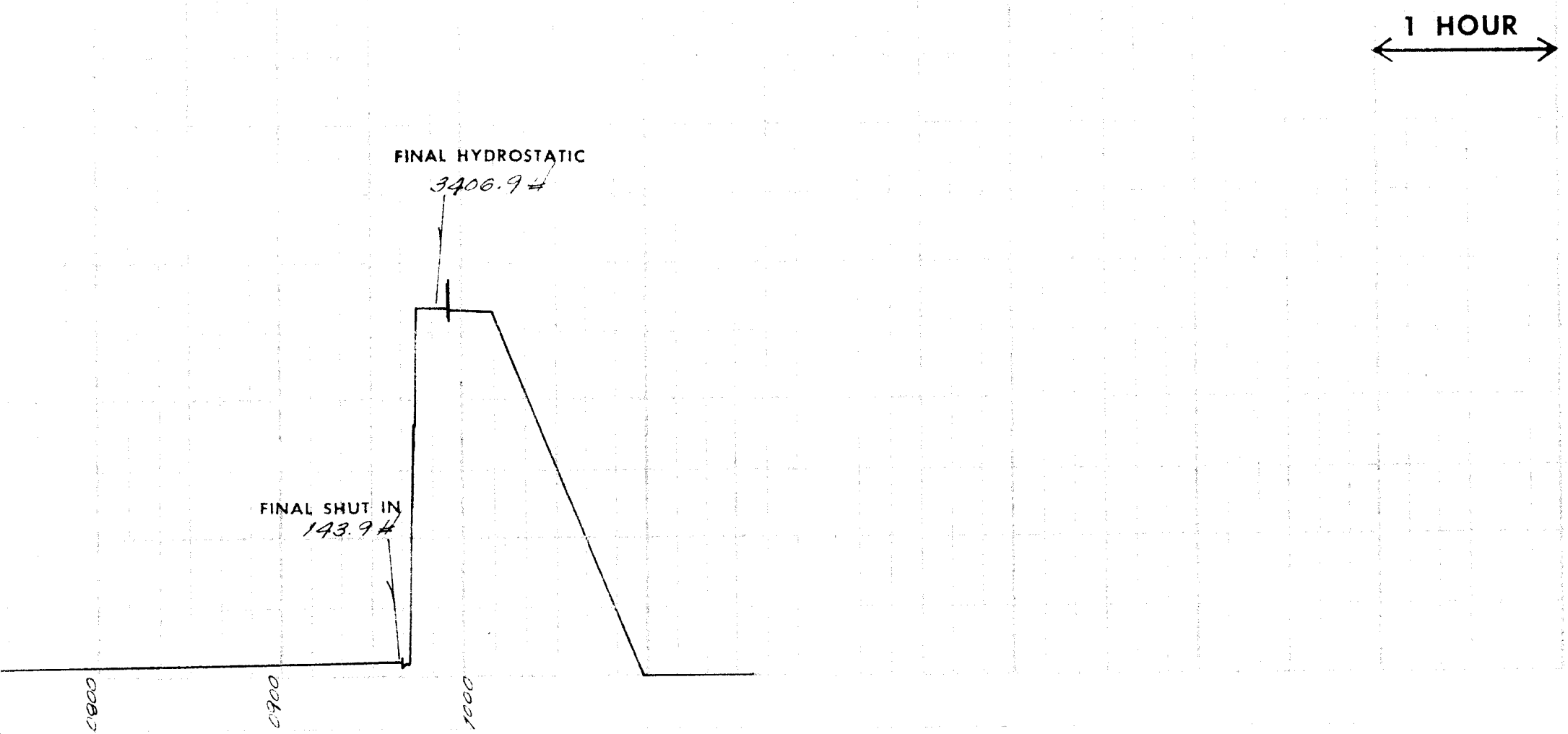
Instrument:
Number J-073

Capacity 6400 p.s.i.

Depth 7075 ft.

*a continuous tracing of the original chart




1 HOUR
FINAL HYDROSTATIC
3406.9#
FINAL SHUT IN
143.9#
0800
0900
1000

Form J-228a

JOHNSTON Schlumberger

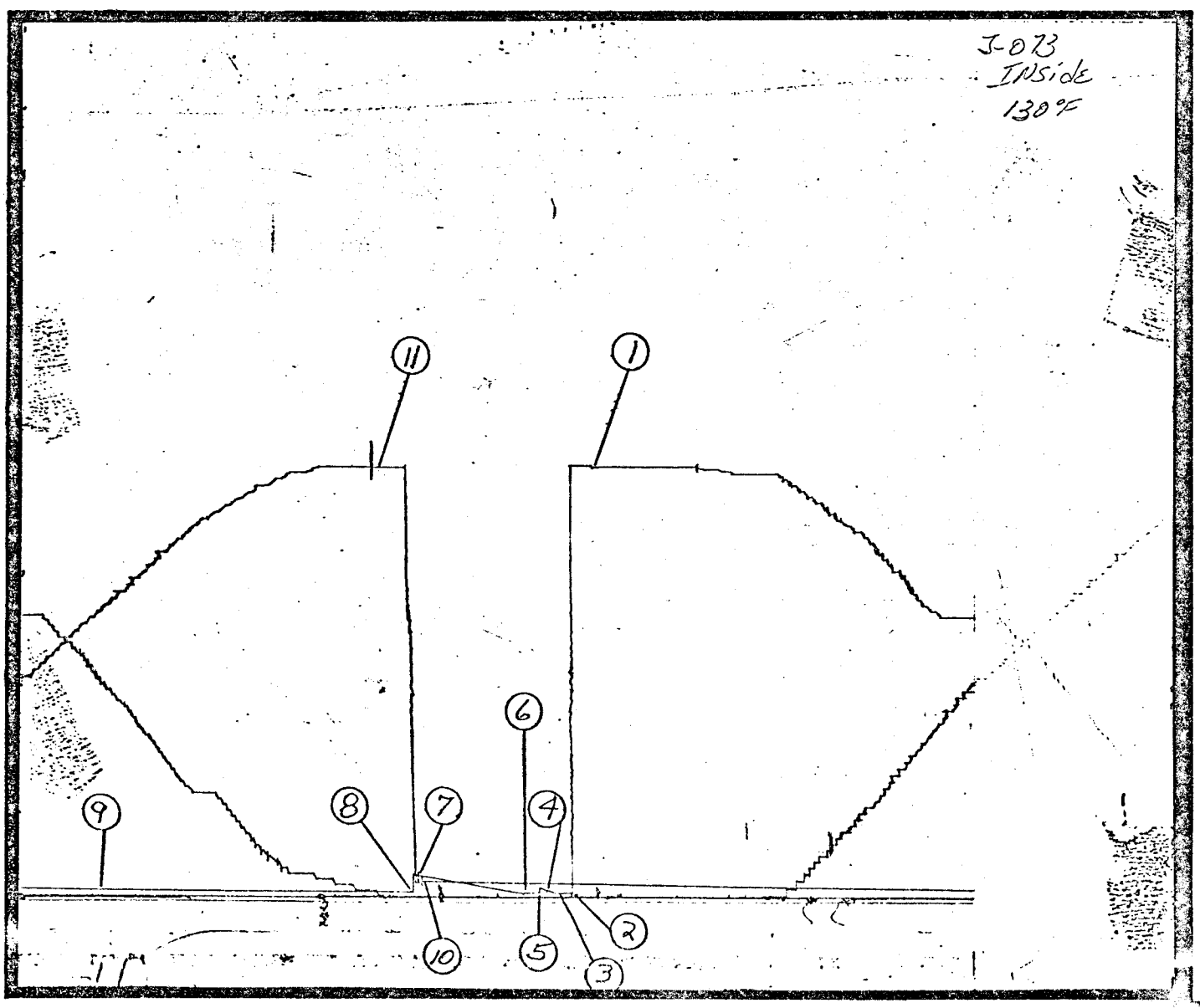
FIELD REPORT NO.: 09591 D

INSTRUMENT NO.: J-073

CAPACITY: 6400#

NO. OF REPORTS: 8-

PRESSURE DATA FROM THIS CHART IS PRESENTED ON NEXT PAGE



JOHNSTON

PRESSURE LOG*

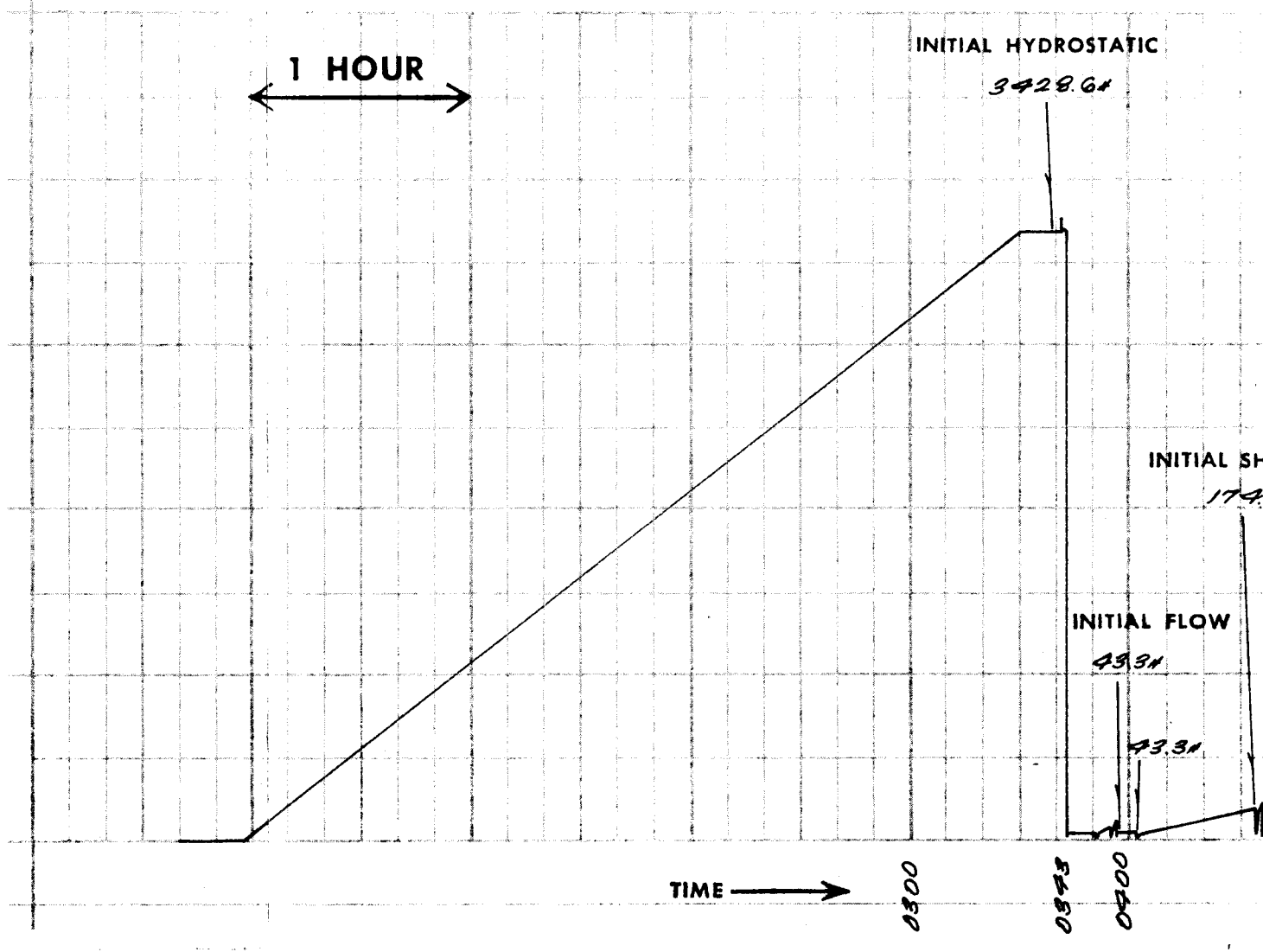
Field Report No. 09612 D

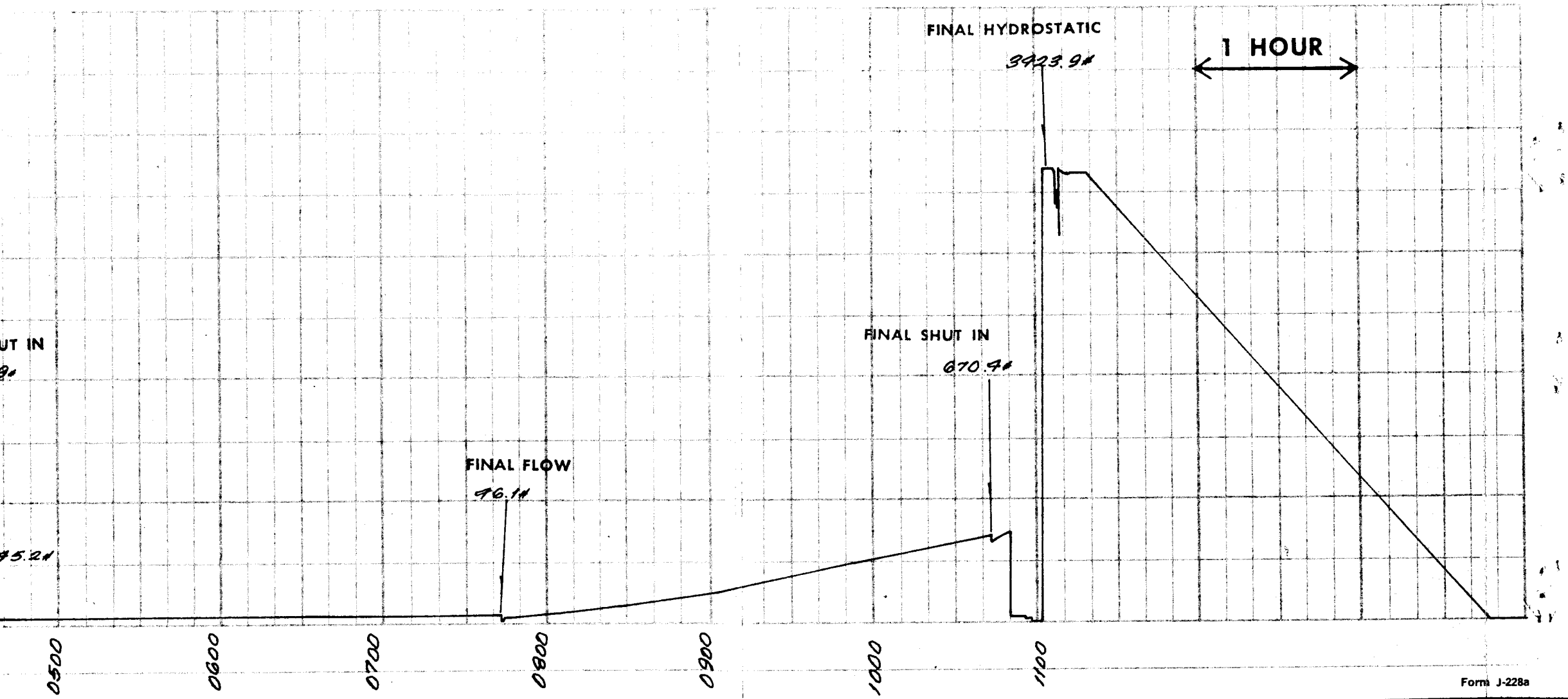
Instrument:
Number J-253

Capacity 4700 p.s.i.

Depth 7237 ft.

*a continuous tracing of the original chart




FINAL HYDROSTATIC
3423.9#
1 HOUR
UT IN
9#
FINAL SHUT IN
670.4#
FINAL FLOW
46.1#
5.2#
0500
0600
0700
0800
0900
1000
1100

Form J-228a

JOHNSTON

PRESSURE LOG*

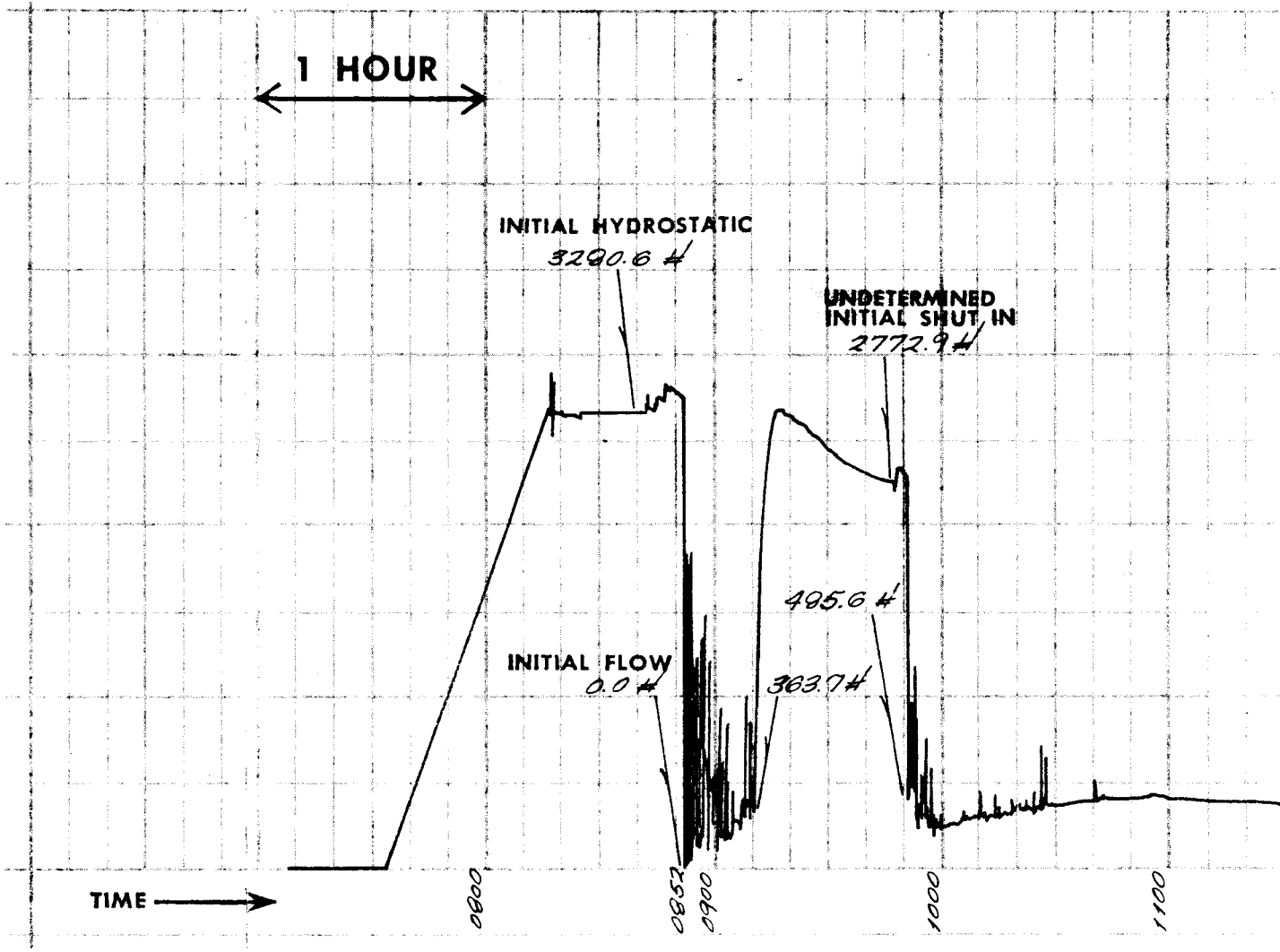
Field Report No. 08795 D

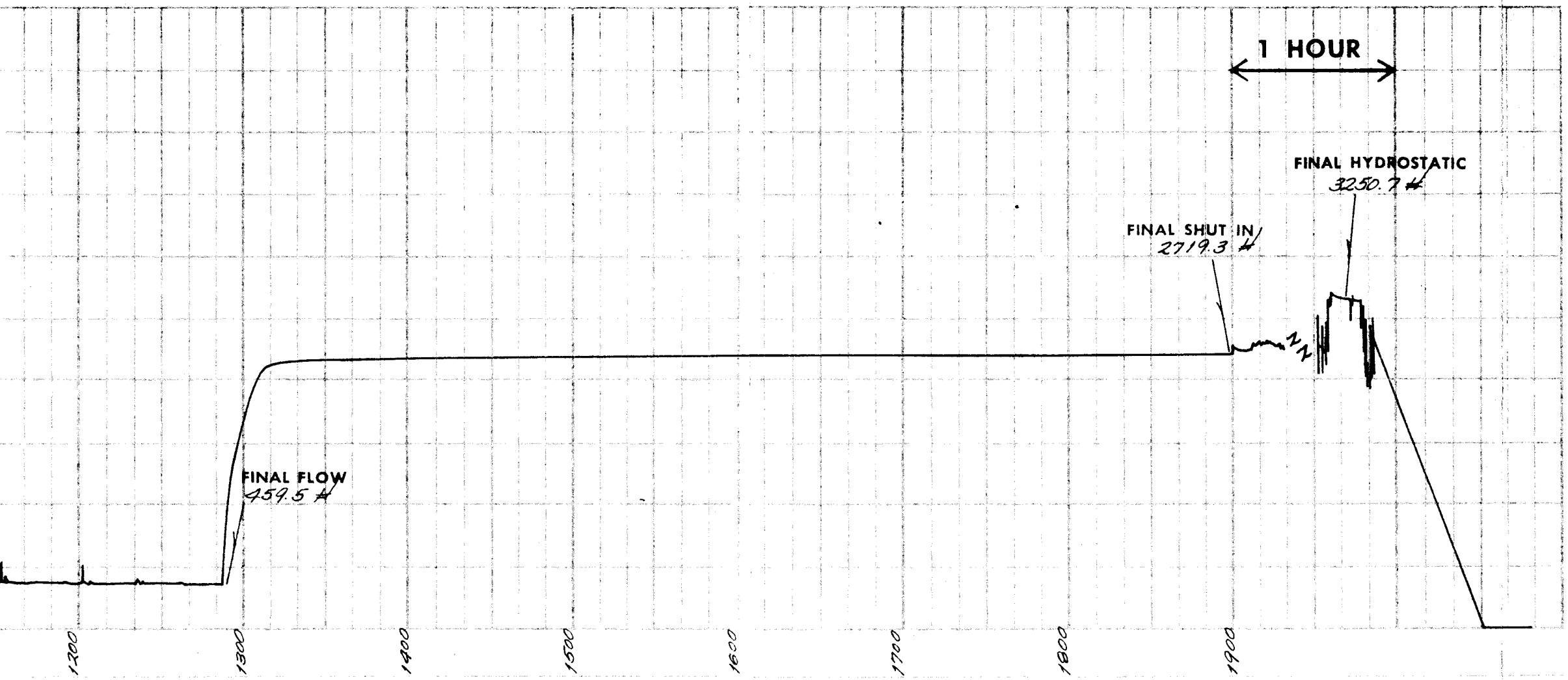
Instrument: Number J-1056

Capacity 6400 p.s.i.

Depth 6968 ft.

*a continuous tracing of the original chart




1 HOUR
FINAL HYDROSTATIC
3250.7 #
FINAL SHUT IN
2719.3 #
FINAL FLOW
459.5 #
1200
1300
1400
1500
1600
1700
1800
1900

Form J-228a

BOTTOM HOLE PRESSURE AND TIME DATA

JOHNSTON Schlumberger

INSTRUMENT NO.: J-073 CAPACITY(P.S.I.): 6400 DEPTH: 7075 FT.

PORT OPENING: INSIDE BOTTOM HOLE TEMP.: 130

DESCRIPTION	LABELED POINTS	PRESSURE (P.S.I.)	GIVEN TIME	COMPUTED TIME
INITIAL HYDROSTATIC MUD	1	3414.6		
INITIAL FLOW(1)	2	52.9		
INITIAL FLOW(2)	3	52.9	5	4
INITIAL SHUT-IN	4	72.1	3	3
SECOND FLOW(1)	5	55.5		
SECOND FLOW(2)	6	55.5	4	4
SECOND SHUT-IN	7	187.5	30	30
FINAL FLOW(1)	8	61.9		
FINAL FLOW(2)	9	70.9	90	90
FINAL SHUT-IN	10	143.9	180	181
FINAL HYDROSTATIC MUD	11	3406.9		

INCREMENTAL READINGS

LABEL POINT	DELTA TIME	PRESSURE (P.S.I.)	T + DT/DT	LOG	PW - PF (P.S.I.)	COMMENTS
1		3414.6				HYDROSTATIC MUD
2	0	52.9				INITIAL FLOW(1)
3	4	52.9				INITIAL FLOW(2)
3	0	52.9				STARTED SHUT-IN
4	3	72.1	2.333	0.368	19.2	INITIAL SHUT-IN
5	0	55.5				SECOND FLOW(1)
6	4	55.5				SECOND FLOW(2)
6	0	55.5				STARTED SHUT-IN
	3	61.9	3.667	0.564	6.4	
	6	76.0	2.333	0.368	20.5	
	9	90.1	1.889	0.276	34.6	
	12	102.9	1.667	0.222	47.4	
	15	118.3	1.533	0.186	62.8	
	18	132.4	1.444	0.160	76.9	
	21	147.8	1.381	0.140	92.3	
	24	161.9	1.333	0.125	106.4	
	27	174.7	1.296	0.113	119.2	
7	30	187.5	1.267	0.103	132.1	SECOND SHUT-IN
8	0	61.9				FINAL FLOW(1)
	10	61.9				
	20	61.9				
	30	63.2				
	40	64.4				
	50	65.7				
	60	68.3				
	70	69.6				
	80	70.9				
9	90	70.9				FINAL FLOW(2)
9	0	70.9				STARTED SHUT-IN
	1	70.9	99.000	1.996	0.	
	2	70.9	50.000	1.699	0.	
	3	70.9	33.667	1.527	0.	

LABEL POINT	DELTA TIME	PRESSURE (P.S.I.)	T + DT/DT	LOG	PW - PF (P.S.I.)	COMMENTS
	4	70.9	25.500	1.407	0.	
	5	70.9	20.600	1.314	0.	
	6	72.1	17.333	1.239	1.3	
	7	72.1	15.000	1.176	1.3	
	8	73.4	13.250	1.122	2.6	
	9	73.4	11.889	1.075	2.6	
	10	73.4	10.800	1.033	2.6	
	12	76.0	9.167	0.962	5.1	
	14	77.3	8.000	0.903	6.4	
	16	78.5	7.125	0.853	7.7	
	18	79.8	6.444	0.809	9.0	
	20	81.1	5.900	0.771	10.3	
	22	82.4	5.455	0.737	11.5	
	24	83.7	5.083	0.706	12.8	
	26	85.0	4.769	0.678	14.1	
	28	86.2	4.500	0.653	15.4	
	30	87.5	4.267	0.630	16.7	
	40	91.4	3.450	0.538	20.5	
	50	95.2	2.960	0.471	24.4	
	60	97.8	2.633	0.421	26.9	
	70	101.6	2.400	0.380	30.8	
	80	105.5	2.225	0.347	34.6	
	90	109.3	2.089	0.320	38.5	
	100	113.2	1.980	0.297	42.3	
	110	115.7	1.891	0.277	44.9	
	120	119.6	1.817	0.259	48.7	
	130	123.4	1.754	0.244	52.6	
	140	127.3	1.700	0.230	56.4	
	150	131.1	1.653	0.218	60.3	
	160	135.0	1.612	0.207	64.1	
	170	138.8	1.576	0.198	68.0	
	180	143.9	1.544	0.189	73.1	
10	181	143.9	1.541	0.188	73.1	FINAL SHUT-IN
11		3406.9				HYDROSTATIC MUD

RECEIVED
FEB 22 1978
DIVISION OF OIL,
GAS, & MINING

JOHNSTON

Schlumberger

technical report

COMPANY THE ANSCHUTZ CORPORATION WELL ANSCHUTZ RANCH #3-1 TEST NO. 6 COUNTY SUMMIT STATE UTAH

F.R. # 09613 D

JOHNSTON
Schlumberger

SURFACE INFORMATION

Description (Rate of Flow)	Time	Pressure (P.S.I.G.)	Surface Choke
Opened Tool	1524	–	1/8''
MUD DROPPED IN ANNULUS			
RE-SET PACKER	1535	–	''
CYCLED TOOL	1540	–	''
RE-OPENED TOOL	1542	–	''
MUD DROPPED IN ANNULUS			

Cushion Type	Amount	Pressure	Bottom Choke
	–		Size 5/8''

MUD DATA

Mud Type L.S.N.D Wt. 9.0
Viscosity 36 Water Loss 9.4 C.C.
Resist: of Mud .3 @ 65 °F; of Filtrate .27 @ 64 °F
Chloride Content 24000 PPM

EQUIPMENT & HOLE DATA

Type Test M.F.E. OPEN HOLE
Formation Tested TWIN CREEK
Elevation 7272 G.L. Ft.
Net Productive Interval – Ft.
Estimated Porosity – %
All Depths Measured From KELLY BUSHING
Total Depth 7550 Ft.
Main Hole/Casing Size 12 1/4''
Rat Hole/Liner Size –
Drill Collar Length 182'; 265' I.D. 2.5''; 3''
Drill Pipe Length 6925' I.D. 3.8''
Packer Depth(s) 7402 & 7408 Ft.

MULTI-FLOW EVALUATOR FLUID SAMPLE DATA

Sampler Pressure _____ P.S.I.G. at Surface
Recovery: Cu. Ft. Gas _____
cc. Oil _____
cc. Water _____
cc. Mud _____
Tot. Liquid cc. _____
Gravity _____ °API @ _____ °F.
Gas/Oil Ratio _____ cu. ft./bbl.

	RESISTIVITY	CHLORIDE CONTENT
Recovery Water	___ @ ___ °F.	___ ppm
Recovery Mud	___ @ ___ °F.	
Recovery Mud Filtrate	___ @ ___ °F.	___ ppm
Mud Pit Sample	___ @ ___ °F.	
Mud Pit Sample Filtrate	___ @ ___ °F.	___ ppm

RECOVERY DESCRIPTION	FEET	BARRELS	% OIL	% WATER	% OTHERS	API GRAVITY	RESISTIVITY	CHL. PPM
–						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	
						@ °F.	@ °F.	

Remarks: UNSUCCESSFUL TEST; 35' OFF BOTTOM, HIT BRIDGE OR FILL-UP. SLID THROUGH, THEN PACKER SEAT FAILED. BOTTOM STAND OF COLLARS FULL OF SAND & SHALE.

Address 1110 DENVER CLUB BUILDING; DENVER, COLORADO 80202

Company THE ANSCHUTZ CORPORATION Field WILD CAT
Well ANSCHUTZ RANCH #3-1 Location SEC. 34 - T4N - R7E
Test Interval 7408' TO 7550' (UNSUCCESSFUL) Test # 6 Date 2-12-78

County SUMMIT State UTAH
Technician SIMPER (ROCK SPRINGS) Test Approved By MR. DOUGLAS WERNER

Field Report No. 09613 D
No. Reports Requested 8 (3X)

JOHNSTON
Schlumberger

BOTTOM HOLE PRESSURE AND TIME DATA

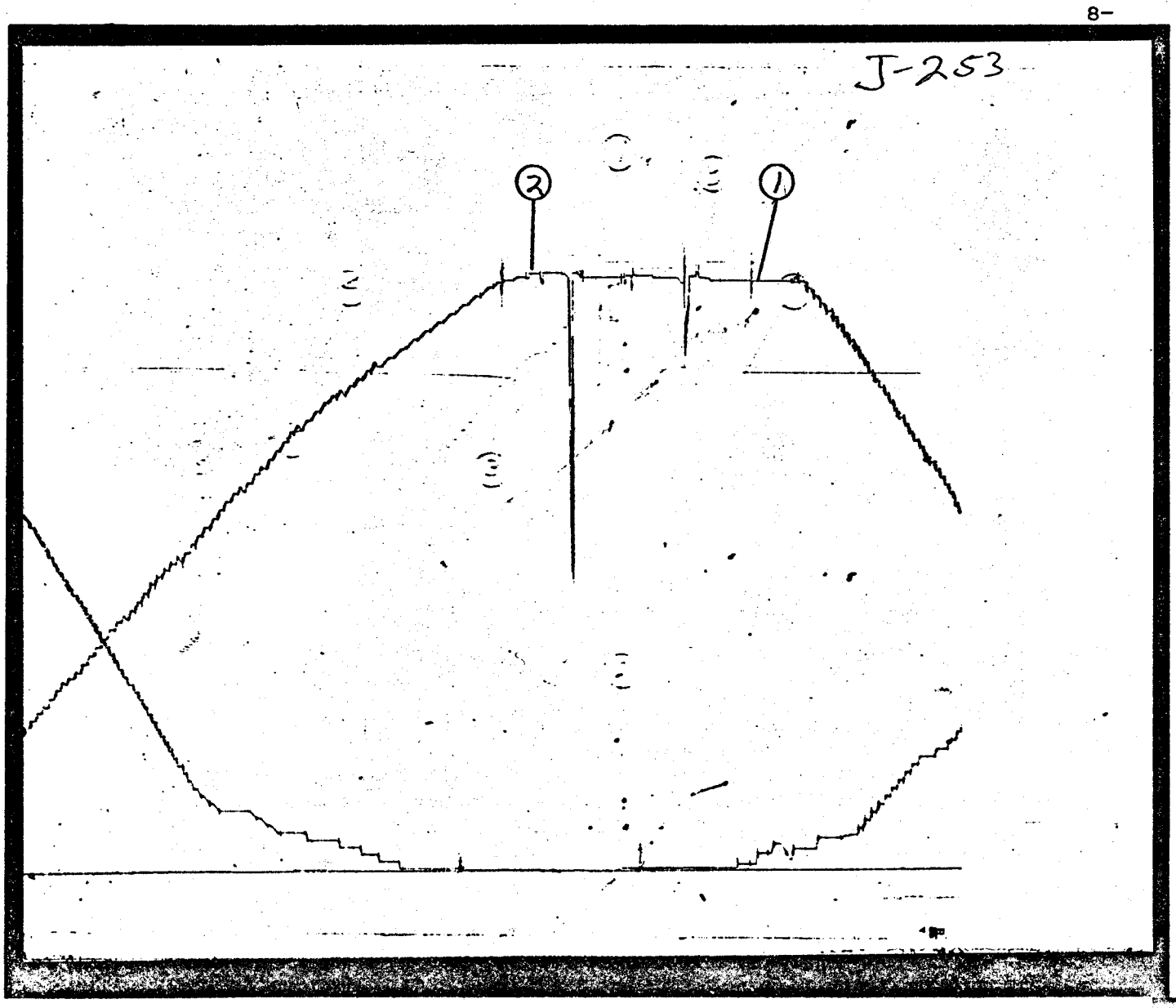
INSTRUMENT NO.: J-253 CAPACITY (P.S.I.): 4700# DEPTH 7422 FT.

PORT OPENING: INSIDE BOTTOM HOLE TEMP.: 139°F. FIELD REPORT NO. 09613 D

DESCRIPTION	LABELED POINTS	PRESSURE (P.S.I.)	GIVEN TIME	COMPUTED TIME
INITIAL HYDROSTATIC MUD	1	3476.4		
INITIAL FLOW (1)				
INITIAL FLOW (2)				
INITIAL SHUT-IN				
SECOND FLOW (1)				
SECOND FLOW (2)				
SECOND SHUT-IN				
FINAL FLOW (1)				
FINAL FLOW (2)				
FINAL SHUT-IN				
FINAL HYDROSTATIC MUD	2	3528.1		

REMARKS: UNSUCCESSFUL TEST.

8-



Phone
522-1206 Area 303

LYNES, INC

Box 712
Sterling, Colo. 80751

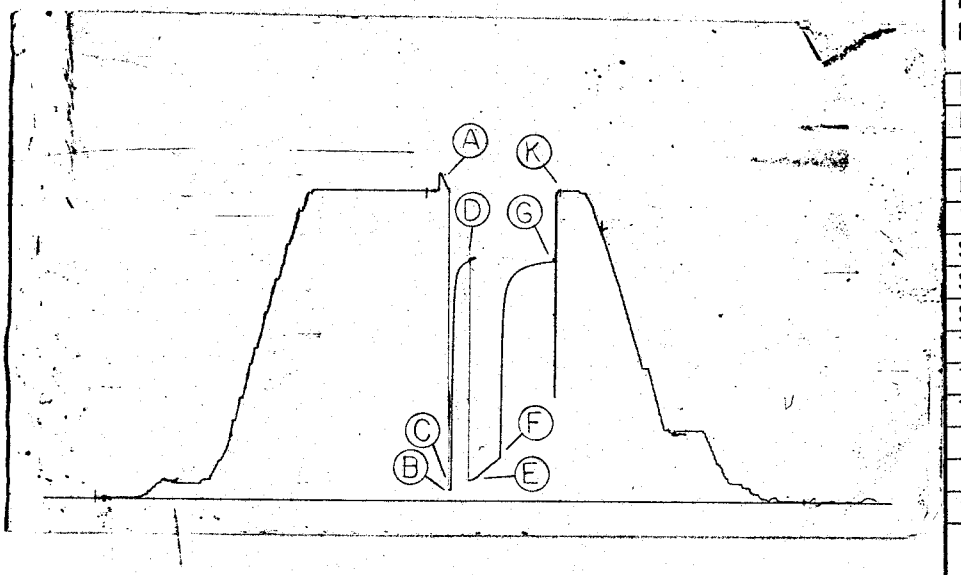
Operator: Anschutz Corporation
Address: See Distribution
Well Name and No.: Anschutz Ranch #3-1
Ticket No.: 10179
Date: 3-31-78
DST No.: 9
No. Final Copies: 8

Contractor	Universal Drlg. Co.	Top Choke	1/4"
Rig No.	7	Bottom Choke	1"
Spot	NW-NW	Size Hole	12 1/4"
Sec.	3	Size Rat Hole	--
Twp.	3 N	Size & Wt. D. P.	4 1/2" 16.60
Rng.	7 E	Size Wt. Pipe	--
Field	Wildcat	I. D. of D. C.	2 1/4"
County	Summit	Length of D. C.	432'
State	Utah	Total Depth	8989'
Elevation	7244' "K.B."	Interval Tested	7579-7650'
Formation	Nugget	Type of Test	Inflate Straddle

Flow No. 1	5	Min.
Shut-in No. 1	30	Min.
Flow No. 2	60	Min.
Shut-in No. 2	95	Min.
Flow No. 3	--	Min.
Shut-in No. 3	--	Min.

Bottom Hole Temp. 179°F
Mud Weight 9.3
Gravity --
Viscosity 55

Tool opened @ 3:50 PM.



Outside Recorder

PRD Make Kuster K-3
No. 15239 Cap. 5500 @ 7584'

Press		Corrected
Initial Hydrostatic	A	3706
Final Hydrostatic	K	3679
Initial Flow	B	122
Final Initial Flow	C	122
Initial Shut-in	D	2839
Second Initial Flow	E	234
Second Final Flow	F	506
Second Shut-in	G	2839
Third Initial Flow	H	--
Third Final Flow	I	--
Third Shut-in	J	--

Lynes Dist.: Rock Springs, Wy.
Our Tester: Herman Coomer
Witnessed By: Mark Wells

Did Well Flow — Gas No Oil No Water No

RECOVERY IN PIPE: 1116' Slightly oil cut mud = 15.85 bbl.

1st Flow - Tool opened with a weak blow and remained thru flow period.

2nd Flow - Tool opened with a weak blow, began to decrease slightly after 45 minutes and died at end of flow period.

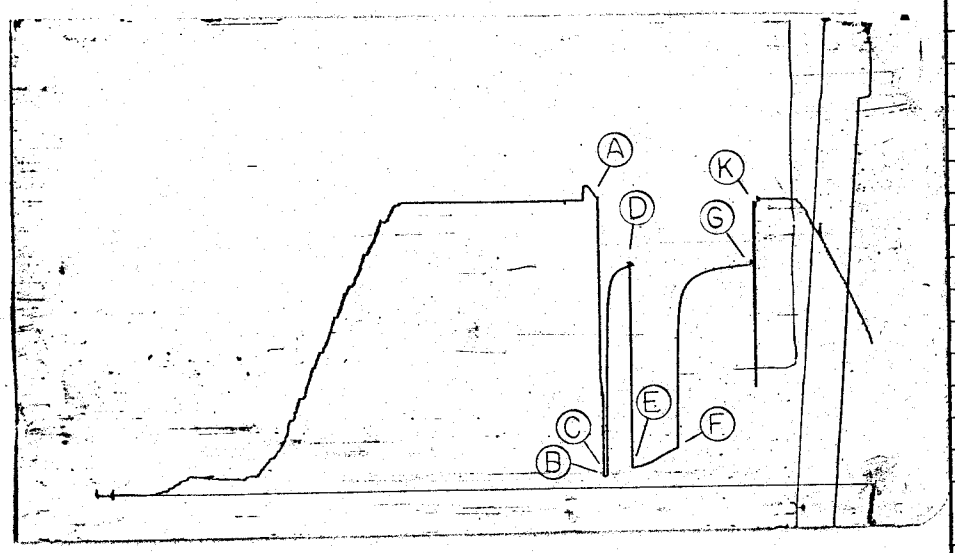
REMARKS:

RECEIVED
APR 10 1978
DIVISION OF OIL, GAS, & MINING

Form 1

LYNES, INC.

Operator Anschutz Corp., Lease & No. Anschutz Ranch #3-1 DST No. 9



Outside Recorder

PRD Make Kuster K-3

No. 9737 Cap. 5900 @ 7584'

Press		Corrected
Initial Hydrostatic	A	3703
Final Hydrostatic	K	3678
Initial Flow	B	132
Final Initial Flow	C	132
Initial Shut-in	D	2831
Second Initial Flow	E	251
Second Final Flow	F	517
Second Shut-in	G	2831
Third Initial Flow	H	--
Third Final Flow	I	--
Third Shut-in	J	--
Pressure Below Bottom Packer Bled To		

PRD Make

No. Cap. @

Press		Corrected
Initial Hydrostatic	A	
Final Hydrostatic	K	
Initial Flow	B	
Final Initial Flow	C	
Initial Shut-in	D	
Second Initial Flow	E	
Second Final Flow	F	
Second Shut-in	G	
Third Initial Flow	H	
Third Final Flow	I	
Third Shut-in	J	
Pressure Below Bottom Packer Bled To		

Form 3

REPORT # 339

WELL NAME - ANSCHUTZ RANCH 3-1

WELL OPERATOR - ANSCHUTZ CORP.

DST NUMBER - 9

RECORDER NUMBER - 15239

FIRST SHUT IN PRESSURE

TIME(MIN) PHI	(T+PHI) /PHI	PSIG
.0	.0000	122
3.0	2.6667	1586
6.0	1.8333	2451
9.0	1.5556	2644
12.0	1.4167	2722
15.0	1.3333	2763
18.0	1.2778	2786
21.0	1.2381	2805
24.0	1.2083	2820
27.0	1.1852	2830
30.0	1.1667	2839

EXTRAPOLATION OF FIRST SHUT IN = 2925.68

REPORT # 339

WELL NAME - ANSCHUTZ RANCH 3-1

WELL OPERATOR - ANSCHUTZ CORP.

DST NUMBER - 9

RECORDER NUMBER - 15239

SECOND SHUT IN PRESSURE

TIME(MIN) PHI	(T+PHI) /PHI	PSIG
.0	.0000	506
9.5	7.8421	2496
19.0	4.4211	2641
28.5	3.2807	2708
38.0	2.7105	2747
47.5	2.3684	2777
57.0	2.1404	2793
66.5	1.9774	2811
76.0	1.8553	2823
85.5	1.7602	2832
95.0	1.6842	2839

FITTED LINE: LOG((TO+PHI)/PHI) = -.00257 PSIG + 7.51265

EXTRAPOLATION OF SECOND SHUT IN = 2927.21 M = 389.64

LYNES, INC.

Fluid Sample Report

Date 3-31-78 Ticket No. 10179

Company Anschutz Corp. DST No. 9

Well Name & No. Anschutz Ranch #3-1 State Utah

County Summit Test Interval 7579-7650'

Pressure in Sampler 20 PSIG BHT 179°F °F

Total Volume of Sampler: 2800 cc.

Total Volume of Sample: 2200 cc.

Oil: None cc.

Water: None cc.

Mud: 2200 cc.

Gas: None cu. ft.

Other: None

R.W. .25 @ 65°F = 28,000 ppm. chl.

Resistivity

Make Up Water 10.0 @ 60°F of Chloride Content 600 ppm.

Mud Pit Sample .25 @ 60°F of Chloride Content 31,000 ppm.

Gas/Oil Ratio Gravity °API @ °F

Where was sample drained

Remarks: Recovery - Top Sample - R.W. 0.28 @ 60°F = 26,000 ppm. chl.

Middle Sample - R.W. 0.25 @ 65°F = 28,000 ppm. chl.

Bototm Smaple - R.W. 0.25 @ 65°F = 28,000 ppm. chl.

Form 5

LYNES, INC.

Distribution of Final Reports

Operator Anschutz Corp. Well Name and No. Anschutz Ranch #3-1

Original & 2 copies: Anschutz Corp., 1110 Denver Club Bldg., Denver, Colorado 80202 Attn: Mr. Phil Harrington, Exploration Dept.

3 copies: Amoco Production Co., Security Life Bldg., Denver, Colorado 80202 Attn: Mr. K.C. Beresford, Exploration Dept.

1 copy: Department of Natural Resources, Division of Oil & Gas, 1588 West North Temple, Salt Lake City, Utah 84116 Attn: Mr. Pat Driscoll

1 copy: Ronald A. Janc, Consulting Geologist, Rm. 436, Dun-May Motel Evanston, Wyoming 82930

Form 6

Phone
522-1206 Area 303

LYNES, INC

Box 712
Sterling, Colo. 80751

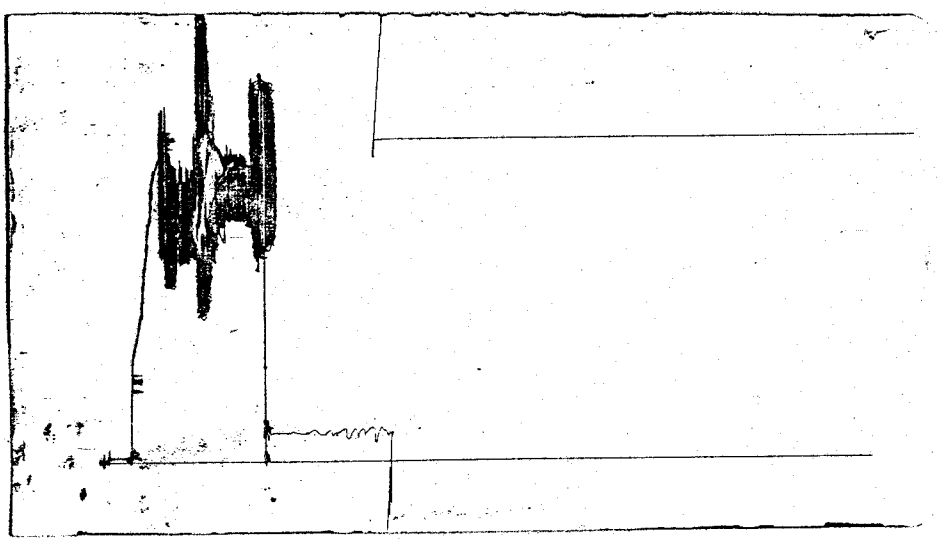
Operator: Anschutz Corp.
Address: See Distribution
Well Name and No.: Anschutz Ranch #3-1
Ticket No.: 10309
Date: 2-18-78
DST No.: 8
No. Final Copies: 8

Contractor	Universal Drlg. Co.	Top Choke	1/4"
Rig No.	7	Bottom Choke	5/8"
Spot	NW-NW	Size Hole	12 1/4"
Sec.	3	Size Rat Hole	--
Twp.	3 N	Size & Wt. D. P.	4 1/2" 16.60
Rng.	7 E	Size Wt. Pipe	4 1/2"
Field	Wildcat	I. D. of D. C.	2 1/4"
County	Summit	Length of D. C.	460'
State	Utah	Total Depth	7700'
Elevation	7244' "K.B."	Interval Tested	7520-7700'
Formation	Nugget Sand	Type of Test	Bottom Hole Conventional

Flow No. 1	5	Min.
Shut-in No. 1	30	Min.
Flow No. 2	90	Min.
Shut-in No. 2	180	Min.
Flow No. 3	--	Min.
Shut-in No. 3	--	Min.

Bottom Hole Temp. 172°F
Mud Weight 9.3
Gravity --
Viscosity 38

Tool opened @ 5:48 PM.



PRD Make Kuster K-3
No. 15239 Cap. 5500 @ --

		Press	Corrected
Initial Hydrostatic	A	--	
Final Hydrostatic	K	--	
Initial Flow	B	--	
Final Initial Flow	C	--	
Initial Shut-in	D	--	
Second Initial Flow	E	--	
Second Final Flow	F	--	
Second Shut-in	G	--	
Third Initial Flow	H	--	
Third Final Flow	I	--	
Third Shut-in	J	--	

Lynes Dist.: Rock Springs, Wy.
Our Tester: John Webb
Witnessed By: Douglas Weaver

Did Well Flow – Gas No Oil No Water No
RECOVERY IN PIPE:

MISRUN - Slid tool 12' during test. Charts indicate tool was completely plugged. Tools were stuck after test.

REMARKS:

Form 1

LYNES, INC.

Fluid Sample Report

Date 3-16-78 Ticket No. 10309

Company Anschutz Corporation DST No. 8

Well Name & No. Anschutz Ranch #3-1 State Utah

County Summit Test Interval 7520-7700'

Pressure in Sampler 0 PSIG BHT 172 °F

Total Volume of Sampler: 2100 cc.

Total Volume of Sample: 2000 cc.

Oil: None cc.

Water: 600 cc.

Mud: 1400 Mud & cuttings cc.

Gas: None cu. ft.

Other: None

R.W. .26 @ 55°F = 35,000 ppm. chl.

Resistivity

Make Up Water _____ @ _____ of Chloride Content _____ ppm.

Mud Pit Sample _____ @ _____ of Chloride Content _____ ppm.

Gas/Oil Ratio _____ Gravity _____ °API @ _____ °F

Where was sample drained On location.

Remarks:

Form 5

LYNES, INC.

Distribution of Final Reports

Operator Anschutz Corp. Well Name and No. Anschutz Ranch #3-1

Original & 2 copies: Anschutz Corp., 1110 Denver Club Bldg., Denver, Colorado 80202 Attn: Mr. Phil Harrington, Exploration Dept.

3 copies: Amoco Production Co., Security Life Bldg., Denver, Colorado 80202 Attn: Mr. K.C. Beresford, Exploration Dept.

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1 copy: Ronald A. Janc, Consulting Geologist, Rm. 436, Dun-May Motel Evanston, Wyoming 82930

Form 6

Phone
22-1206 Area 303

LYNES, INC.

Box 712
Sterling, Colo. 80751

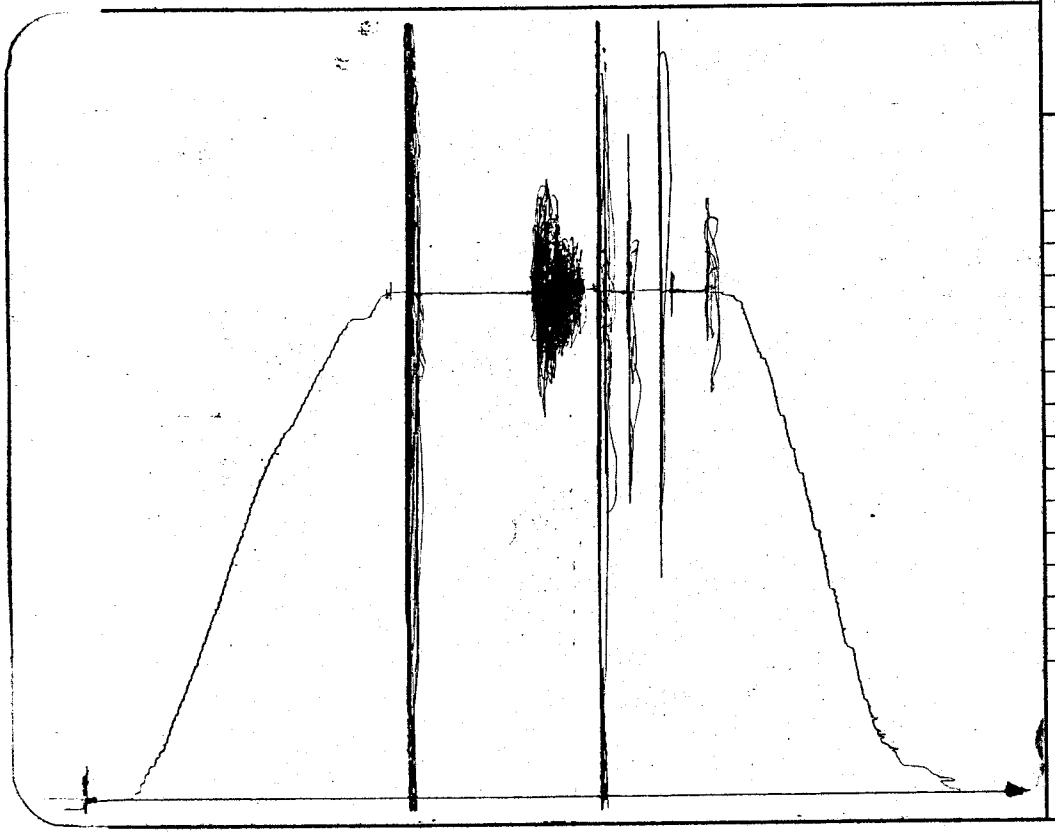
Operator Anschutz Corp.
Address See Distribution
Well Name and No. Anschutz Ranch #3-1
Ticket No. 10308
Date 2-14-78
DST No. 7
No. Final Copies 8

Contractor	Universal Drlg. Co.	Top Choke	1/4"
Rig No.	7	Bottom Choke	1"
Spot	NW-NW	Size Hole	12 1/4"
Sec.	3	Size Rat Hole	--
Twp.	3 N	Size & Wt. D. P.	4 1/2" 16.60
Rng.	7 E	Size Wt. Pipe	--
Field	Wildcat	I. D. of D. C.	2 1/4"
County	Summit	Length of D. C.	498'
State	Utah	Total Depth	7550'
Elevation	7244' "K.B."	Interval Tested	7407-7470'
Formation	Twin Creek	Type of Test	Inflate Straddle

Flow No. 1	5	Min.
Shut-in No. 1	--	Min.
Flow No. 2	--	Min.
Shut-in No. 2	--	Min.
Flow No. 3	--	Min.
Shut-in No. 3	--	Min.

Bottom Hole Temp.	128°F
Mud Weight	9
Gravity	--
Viscosity	38

Tool opened @ 2:50 PM.



PRD Make Kuster AK-1
No. 2559 Cap. 5400 @ --

Press		Corrected
Initial Hydrostatic	A	--
Final Hydrostatic	K	--
Initial Flow	B	--
Final Initial Flow	C	--
Initial Shut-in	D	--
Second Initial Flow	E	--
Second Final Flow	F	--
Second Shut-in	G	--
Third Initial Flow	H	--
Third Final Flow	I	--
Third Shut-in	J	--

Lynes Dist.: Rock Springs, Wy.
Our Tester: George Baucom
Witnessed By: Douglas Weaver

Did Well Flow – Gas No Oil No Water No
RECOVERY IN PIPE: --

1st Flow - Tool opened with a 1/4" underwater blow and remained thru flow period.

MISRUN - No packer seats.

REMARKS:

Form 1

LYNES, INC.

Distribution of Final Reports

Operator Anschutz Corp. Well Name and No. Anschutz Ranch #3-1

Original & 2 copies: Anschutz Corp., 1110 Denver Club Bldg., Denver, Colorado 80202 Attn: Mr. Phil Harrington, Exploration Dept.

3 copies: Amoco Production Co., Security Life Bldg., Denver, Colorado 80202 Attn: Mr. K.C. Beresford, Exploration Dept.

1 copy: Department of Natural Resources, Division of Oil & Gas, 1588 West North Temple, Salt Lake City, Utah 84116 Attn: Mr. Pat Driscoll

1 copy: Ronald A. Janc, Consulting Geologist, Rm. 436, Dun-May Motel Evanston, Wyoming 82930

Form 6

November 29, 1978

MEMO TO FILE

Re: ANSCHUTZ CORPORATION
Well No. Anschutz Ranch 3-1
NW NW Section 3, T. 3N, R. 7E
Summit County, Utah

This office received a call from Mr. Ronald Jance requesting permission to plug back the above well. It had been intended to drill to 16,000'. However, severe mechanical difficulties took place, and it became virtually impossible to drill past 13,970'. Teh pertinent gelogical tops are:

Twin Creek	6060'
Dinwoody	11970'
Phosphoria	12494'
Weber	13907

There is a permanent string of 9 5/8" pipe set at 13,070'.

The well will be plugged by setting 100' across the top of the Weber and the bottom of the Phosphoria; across the top of the Phosphoria and bottom of the Dinwoody, and a 100' plug half in and half out of the 9 5/8" pipe. A Bridge plug will be set at 6,180 and 3-5 yards of cement will be set upon this.

The well will then be completed as a producing oil well from the Twin Creek Formation.

PATRICK L. DRISCOLL
CONSULTING ENGINEER

PLD/lw

Phone
522-1206 Area 303

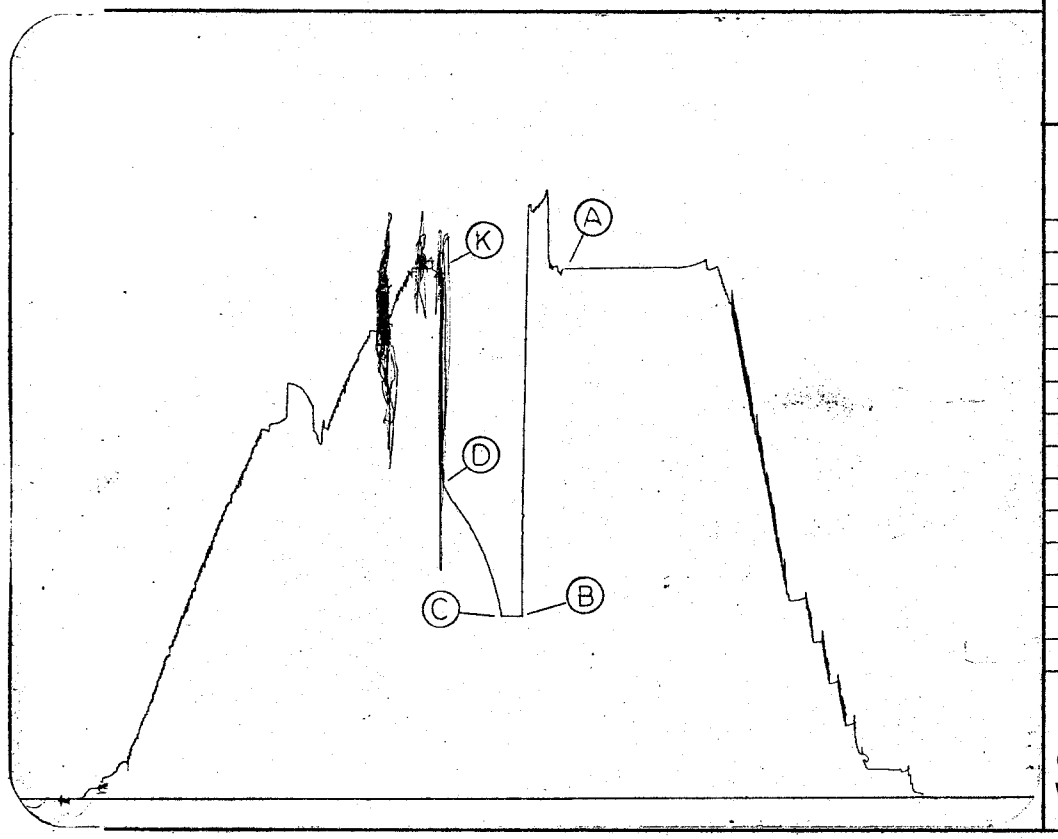
LYNES, INC

Box 3600
Sterling, Colo. 80751

Operator: The Anschutz Corp.
Address: See Distribution
Well Name and No.: Anschutz Ranch #3-1
Ticket No.: 13679
Date: 12-10-78
DST No.: 19
No. Final Copies: 13

Contractor	Universal Drlg. Co.	Top Choke	1/4"	Flow No. 1	30 Min.
Rig No.	7	Bottom Choke	1"	Shut-in No. 1	90 Min.
Spot	NW-NW	Size Hole	8 1/2"	Flow No. 2	-- Min.
Sec.	3	Size Rat Hole	--	Shut-in No. 2	-- Min.
Twp.	3 N	Size & Wt. D. P.	4 1/2" 16.60	Flow No. 3	-- Min.
Rng.	7 E	Size Wt. Pipe	--	Shut-in No. 3	-- Min.
Field	Wildcat	I. D. of D. C.	2 1/4"		
County	Summit	Length of D. C.	603'		
State	Utah	Total Depth	13970'	Bottom Hole Temp.	196°F
Elevation	7244' "K.B."	Interval Tested	12242-12338'	Mud Weight	8.9
Formation	Dinwoody	Type of Test	Inflate Straddle	Gravity	--
				Viscosity	58

Tool opened @ 10:30 AM.



Inside Recorder

PRD Make Kuster AK-1
No. 10240 Cap. 8300 @ 12215'

Press		Corrected
Initial Hydrostatic	A	5629
Final Hydrostatic	K	5629
Initial Flow	B	1931
Final Initial Flow	C	1931
Initial Shut-in	D	3303
Second Initial Flow	E	--
Second Final Flow	F	--
Second Shut-in	G	--
Third Initial Flow	H	--
Third Final Flow	I	--
Third Shut-in	J	--

Lynes Dist.: Rock Springs, WY.
Our Tester: George Baucom
Witnessed By: Dutch Allred

Did Well Flow – Gas No Oil No Water No

RECOVERY IN PIPE: 4300' Water cushion (Ran 4300' Ammonia water cushion.)

Top Sample: R.W. 1.7 @ 85°F = 2,800 ppm. chl.
Middle Sample: R.W. 1.5 @ 85°F = 3,200 ppm. chl.
Bottom Sample: R.W. 1.3 @ 80°F = 3,800 ppm. chl.

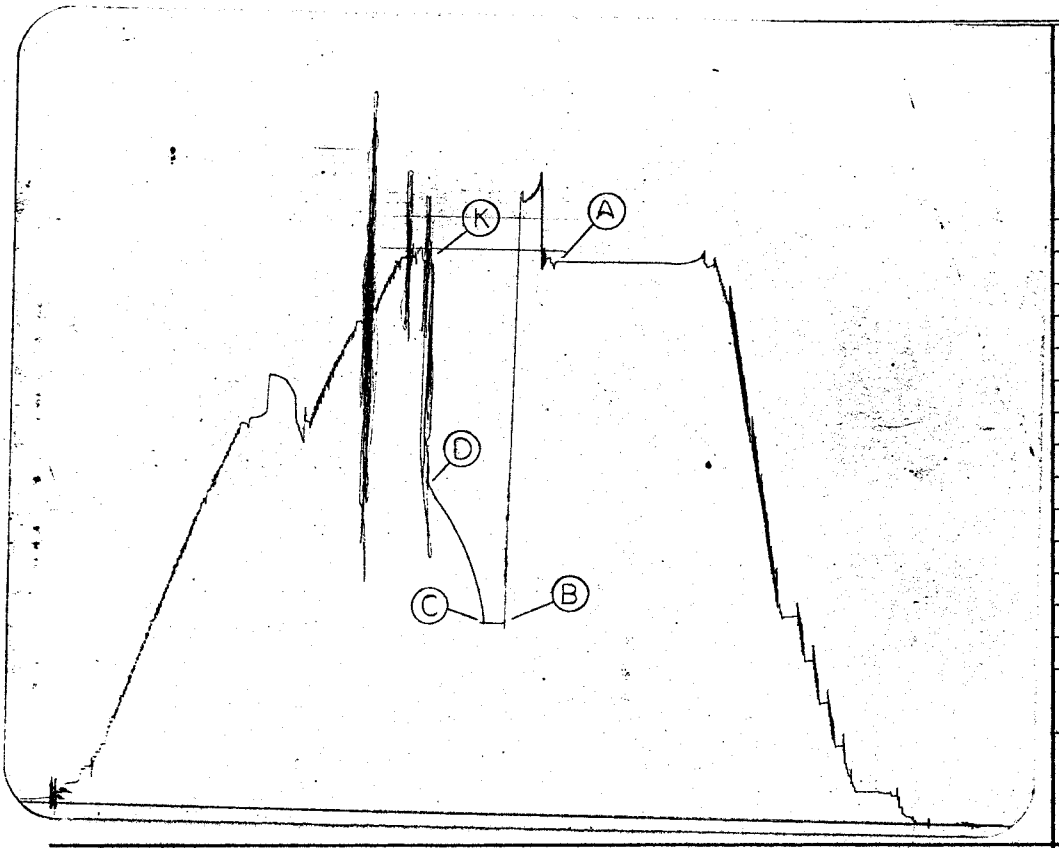
Blow Description:

Flow: Tool opened with a 1/8" underwater blow, died in 13 minutes. Began to increase in 20 minutes to a weak blow, died in 27 minutes and remained.

Form 1

LYNES, INC.

Operator The Anschutz Corp. Lease & No. Anschutz Ranch #3-1 DST No. 19

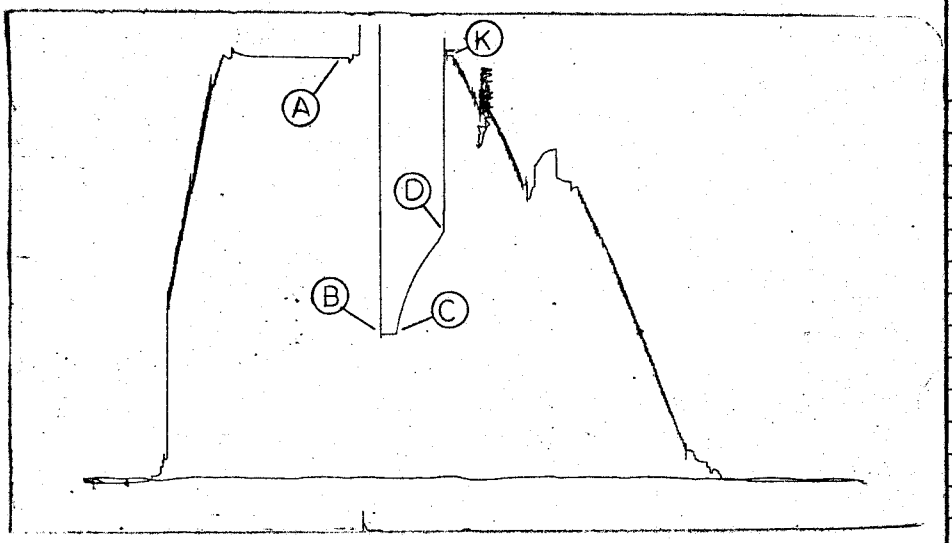


Inside Recorder

PRD Make Kuster AK-1

No. 10239 Cap. 7900 @ 12210'

Press		Corrected
Initial Hydrostatic	A	5625
Final Hydrostatic	K	5625
Initial Flow	B	1928
Final Initial Flow	C	1928
Initial Shut-in	D	3300
Second Initial Flow	E	--
Second Final Flow	F	--
Second Shut-in	G	--
Third Initial Flow	H	--
Third Final Flow	I	--
Third Shut-in	J	--
Pressure Below Bottom Packer Bled To		



Outside Recorder

PRD Make Kuster K-3

No. 8682 Cap. 6200 @ 12252'

Press		Corrected
Initial Hydrostatic	A	5683
Final Hydrostatic	K	5683
Initial Flow	B	1966
Final Initial Flow	C	1966
Initial Shut-in	D	3333
Second Initial Flow	E	--
Second Final Flow	F	--
Second Shut-in	G	--
Third Initial Flow	H	--
Third Final Flow	I	--
Third Shut-in	J	--
Pressure Below Bottom Packer Bled To		

Form 3

LYNES, INC.

Operator The Anschutz Corp. Lease & No. Anschutz Ranch #3-1 DST No. 19

Recorder No. 10240 @ 12215'

Initial Shut-In

0	Min.	1931	Psig.
6	"	2128	"
12	"	2279	"
18	"	2404	"
24	"	2518	"
30	"	2618	"
36	"	2704	"
42	"	2784	"
48	"	2853	"
54	"	2927	"
60	"	2988	"
66	"	3045	"
72	"	3099	"
78	"	3149	"
84	"	3224	"
90	"	3303	"

Form 2

LYNES, INC.

Sampler Report

Company: The Anschutz Corp. Date: 12-10-78

Well Name & No.: Anschutz Ranch #3-1 Ticket No.: 13679

County: Summit State: Utah

Test Interval: 12242-12338' DST No.: 19

Total Volume of Sampler: 2000 cc.

Total Volume of Sample: 2000 cc.

Pressure in Sampler: 0 psig

Oil: None cc.

Water: None cc.

Mud: 2000 cc.

Gas: None cu. ft.

Other: None

R.W. 1.2 @ 50°F = 6,900 ppm. chl.

Resistivity

Make Up Water 11.0 @ 85°F of Chloride Content 450 ppm.

Mud Pit Sample 1.5 @ 75°F of Chloride Content 3,800 ppm.

Gas/Oil Ratio _____ Gravity _____ °API @ _____ °F

Where was sample drained On location.

Remarks:

Form 5

LYNES, INC.

Distribution of Final Reports

Operator The Anschutz Corporation Well Name and No. Anschutz Ranch #3-1

Original & 1 copy: The Anschutz Corp., 555 17th St., Suite 2400, Denver, CO 80202
Attn: Mr. Chas. Williams, Expl. Dept.

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1 copy: Narmco, 732 Republic Bldg., Denver, CO 80202 Attn: Neal Harr

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Attn: Mr. Cliff Bruce

2 copies: Champlin Petroleum, P. O. Box 1257, Englewood, CO 80150
Attn: Pat Hiatt

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1 copy: Utah Department of Natural Resources, Division of Oil & Gas, 1588 West North Temple, Salt Lake City, Utah 84111 Attn: Pat Driscoll

Form 6

Phone
522-1206 Area 303

LYNES, INC

Box 3600
Sterling, Colo. 80751

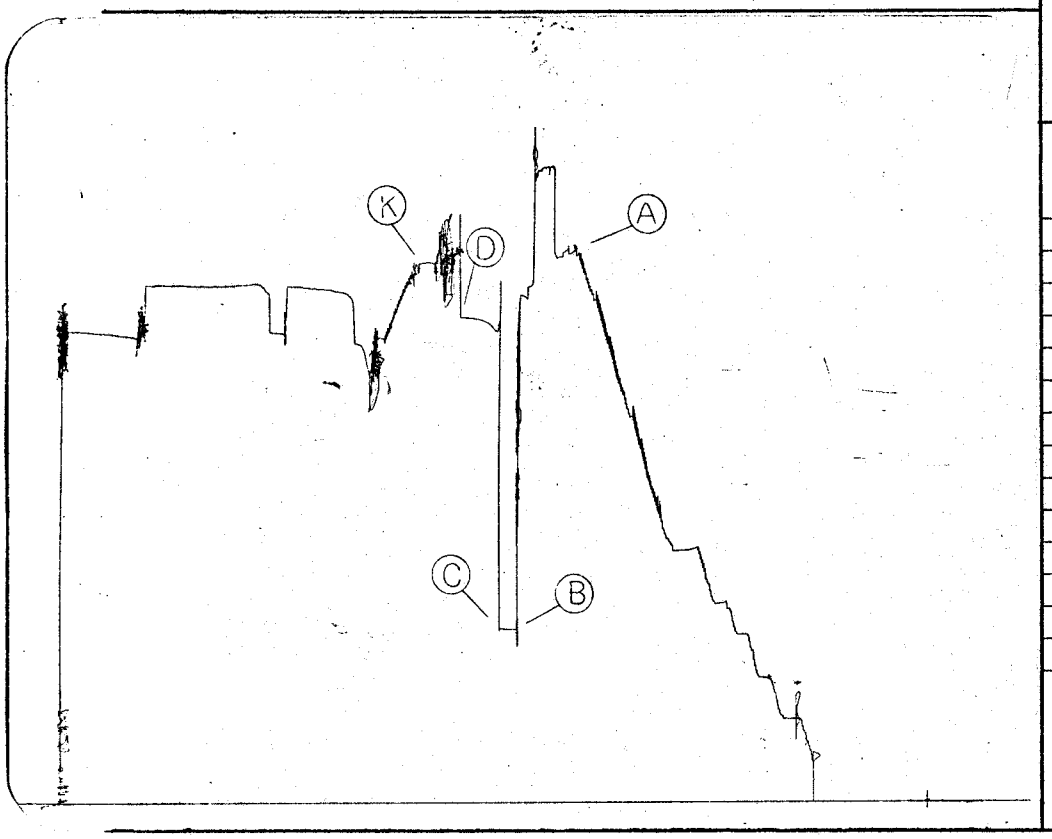
Operator The Anschutz Corp.
Address See Distribution
Well Name and No. Anschutz Ranch #3-1
Ticket No. 13678
Date 12-6-78
No. Final Copies 13
DST No. 18

Contractor	Universal Drlg. Co.	Top Choke	1/4"
Rig No.	7	Bottom Choke	1"
Spot	NW-NW	Size Hole	8 1/2"
Sec.	3	Size Rat Hole	--
Twp.	3 N	Size & Wt. D. P.	4 1/2" 16.60
Rng.	7 E	Size Wt. Pipe	--
Field	Wildcat	I. D. of D. C.	2 1/4"
County	Summit	Length of D. C.	630'
State	Utah	Total Depth	13970'
Elevation	7244' "K.B."	Interval Tested	12502-12515'
Formation	Upper Phosphoria	Type of Test	Inflate Straddle

Flow No. 1	15	Min.
Shut-in No. 1	60	Min.
Flow No. 2	--	Min.
Shut-in No. 2	--	Min.
Flow No. 3	--	Min.
Shut-in No. 3	--	Min.

Bottom Hole Temp. 195°F
Mud Weight 8.9
Gravity --
Viscosity 66

Tool opened @ 12:05 PM.



Outside Recorder

PRD Make Kuster AK-1
No. 10240 Cap. 6200 @ 12510'

Press		Corrected
Initial Hydrostatic	A	5795
Final Hydrostatic	K	5725
Initial Flow	B	1830
Final Initial Flow	C	1837
Initial Shut-in	D	5146
Second Initial Flow	E	--
Second Final Flow	F	--
Second Shut-in	G	--
Third Initial Flow	H	--
Third Final Flow	I	--
Third Shut-in	J	--

Lynes Dist.: Rock Springs, Wy.
Our Tester: George Baucom
Witnessed By: Dutch Allred

Did Well Flow – Gas No Oil No Water No (Test was reverse circulated.)
RECOVERY IN PIPE: 4300' Water cushion = 55.20 bbl. (Ran 4300' ammonia & water cushion)

Top Sample - R.W. 2.8 @ 70°F = 2,000 ppm. chl.
Bottom Sample - R.W. 2.8 @ 70°F = 2,000 ppm. chl.

Blow Description:

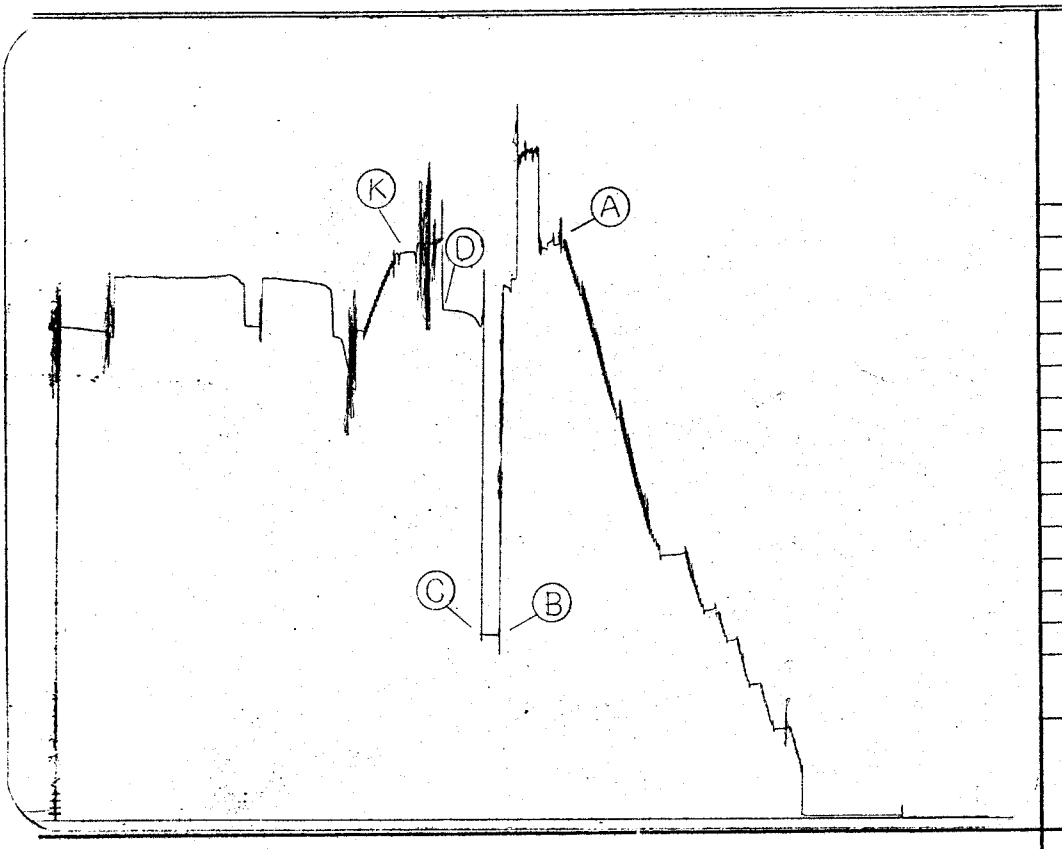
Flow - Tool opened with a very weak blow, increased slowly to a 1" underwater blow at end of flow period.

The character of the shut-in pressure build-up curve indicates the tool possibly slid very slightly at the beginning of the shut-in period. Because of the possibility of the tool slippage, the reliability of the shut-in pressure and the extrapolated pressure may be subject to question.

Form 1

LYNES, INC.

Operator The Anschutz Corp. Lease & No. Anschutz Ranch #3-1 DST No. 18

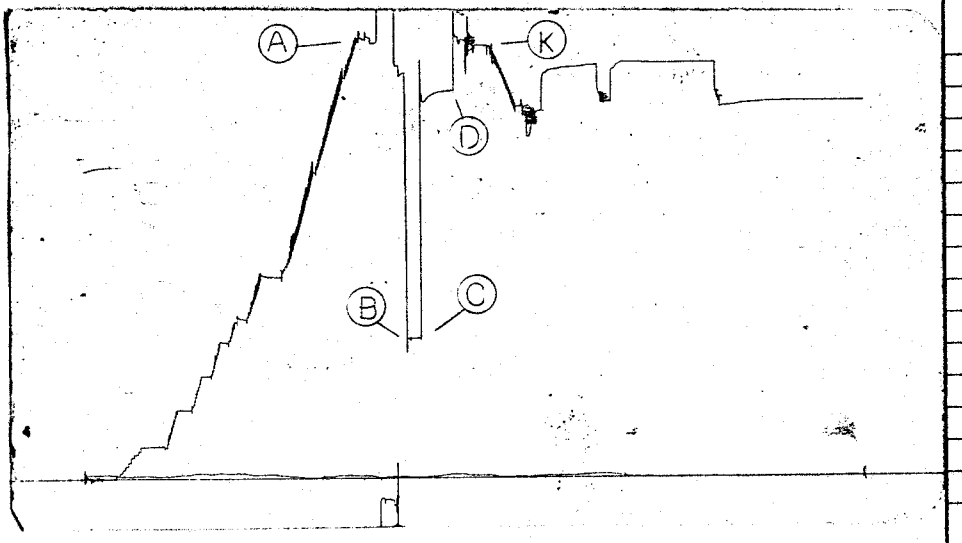


Inside Recorder

PRD Make Kuster AK-1

No. 10239 Cap. 7900 @ 12460'

Press		Corrected
Initial Hydrostatic	A	5812
Final Hydrostatic	K	5742
Initial Flow	B	1863
Final Initial Flow	C	1876
Initial Shut-in	D	5192
Second Initial Flow	E	--
Second Final Flow	F	--
Second Shut-in	G	--
Third Initial Flow	H	--
Third Final Flow	I	--
Third Shut-in	J	--
Pressure Below Bottom Packer Bled To		



Outside Recorder

PRD Make Kuster K-3

No. 8682 Cap. 6200 @ 12510'

Press		Corrected
Initial Hydrostatic	A	5873
Final Hydrostatic	K	5791
Initial Flow	B	1870
Final Initial Flow	C	1878
Initial Shut-in	D	5186
Second Initial Flow	E	--
Second Final Flow	F	--
Second Shut-in	G	--
Third Initial Flow	H	--
Third Final Flow	I	--
Third Shut-in	J	--
Pressure Below Bottom Packer Bled To		

Form 3

REPORT #1490

WELL NAME - ANSCHUTZ-RANCH 3-1

WELL OPERATOR - THE ANSCHUTZ CORP.

DST NUMBER - 18

RECORDER NUMBER - 10240

FIRST SHUT IN PRESSURE

TIME(MIN) PHI	(T+PHI) /PHI	PSIG
.0	.0000	1837
6.0	3.5000	5021
12.0	2.2500	5067
18.0	1.8333	5092
24.0	1.6250	5109
30.0	1.5000	5121
36.0	1.4167	5129
42.0	1.3571	5134
48.0	1.3125	5138
54.0	1.2778	5142
60.0	1.2500	5146

FITTED LINE: LOG((TO+PHI)/PHI) = -.00295 PSIG + 15.25973

EXTRAPOLATION OF FIRST SHUT IN = 5178.89 M = 339.38

LYNES, INC.

Sampler Report

Company: The Anschutz Corp. Date: 12-6-78

Well Name & No.: Anschutz Ranch #3-1 Ticket No.: 13678

County: Summit State: Utah

Test Interval: 12502-12515' DST No.: 18

Total Volume of Sampler: 2000 cc.

Total Volume of Sample: 2000 cc.

Pressure in Sampler: 0 psig

Oil: None cc.

Water: None cc.

Mud: 2000 cc.

Gas: None cu. ft.

Other: None

R.W. .75 @ 70°F = 8,000 ppm. chl.

Resistivity

Make Up Water 11.0 @ 75°F of Chloride Content 450 ppm.

Mud Pit Sample .26 @ 50°F of Chloride Content 35,000 ppm.

Gas/Oil Ratio _____ Gravity _____ °API @ _____ °F

Where was sample drained On location.

Remarks:

Form 5

LYNES, INC.

Distribution of Final Reports

Operator The Anschutz Corporation Well Name and No. Anschutz Ranch #3-1

Original & 1 copy: The Anschutz Corp., 555 17th St., Suite 2400, Denver, CO 80202
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Attn: Pat Hiatt

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1 copy: Utah Department of Natural Resources, Division of Oil & Gas, 1588 West North Temple, Salt Lake City, Utah 84111 Attn: Pat Driscoll

Form 6

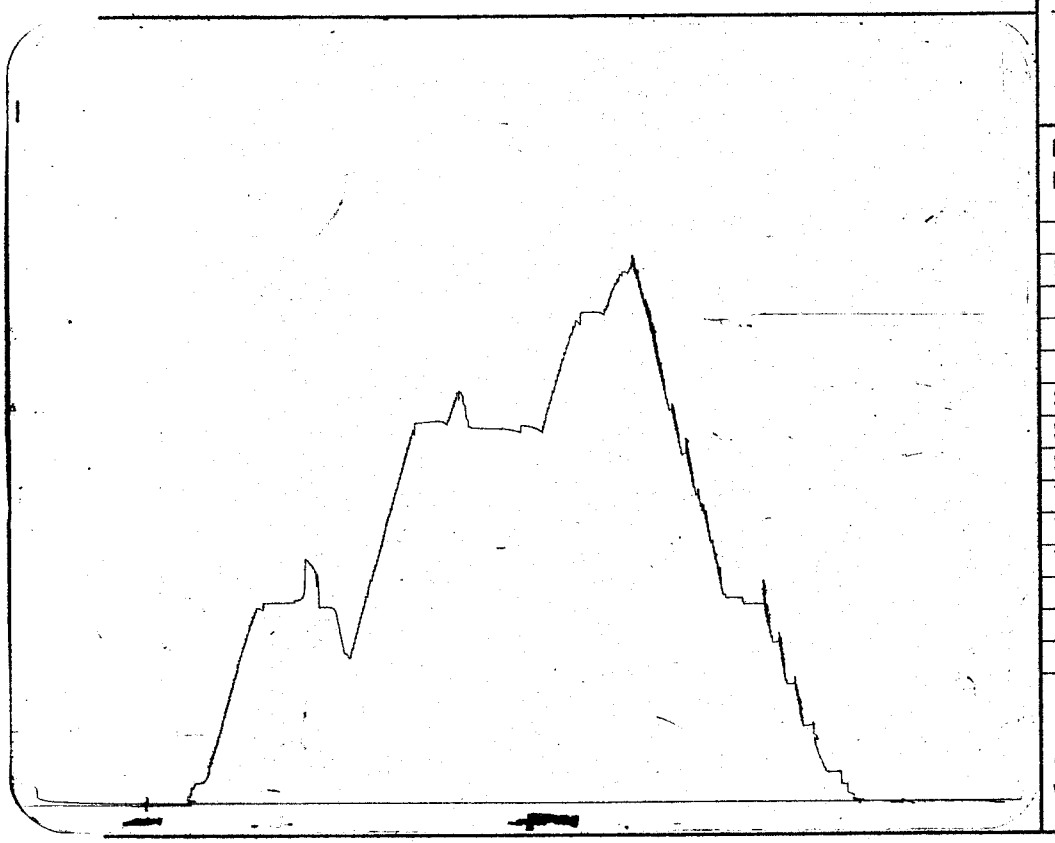
Phone
522-1206 Area 303

LYNES, INC

Box 3600
Sterling, Colo. 80751

Contractor	Universal Drlg. Co.	Top Choke	1"
Rig No.	7	Bottom Choke	1"
Spot	NW-NW	Size Hole	8 1/2"
Sec.	3	Size Rat Hole	--
Twp.	3 N	Size & Wt. D. P.	4 1/2" 16.60
Rng.	7 E	Size Wt. Pipe	--
Field	Wildcat	I. D. of D. C.	2 1/4"
County	Summit	Length of D. C.	430'
State	Utah	Total Depth	13970'
Elevation	7244' "K.B."	Interval Tested	12502- 12515'
Formation	Phosphoria	Type of Test	Inflate Straddle

Flow No. 1	--	Min.
Shut-in No. 1	--	Min.
Flow No. 2	--	Min.
Shut-in No. 2	--	Min.
Flow No. 3	--	Min.
Shut-in No. 3	--	Min.
Bottom Hole Temp.	--	
Mud Weight	8.8	
Gravity	--	
Viscosity	85	
Tool opened @	--	



PRD Make Kuster AK-1
No. 10240 Cap. -- @ --

Press		Corrected
Initial Hydrostatic	A	
Final Hydrostatic	K	--
Initial Flow	B	--
Final Initial Flow	C	--
Initial Shut-in	D	--
Second Initial Flow	E	--
Second Final Flow	F	--
Second Shut-in	G	--
Third Initial Flow	H	--
Third Final Flow	I	--
Third Shut-in	J	--

Lynes Dist.: Rock Springs, Wy
Our Tester: George Baucom
Witnessed By: Dutch Allred

Did Well Flow – Gas No Oil No Water No (Test was reverse circulated.)
RECOVERY IN PIPE: Ran 4300' Ammonia & water cushion

MISRUN - Could not reach test interval.

REMARKS: ---

Operator The Anschutz Corp
Address See Distribution
Well Name and No. Anschutz Ranch #3-1
Ticket No. 13677
Date 12-3-78
DST No. 17
No. Final Copies 13

Form 1

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1 copy: Utah Department of Natural Resources, Division of Oil & Gas, 1588 West North Temple, Salt Lake City, Utah 84111 Attn: Pat Driscoll

Form 6

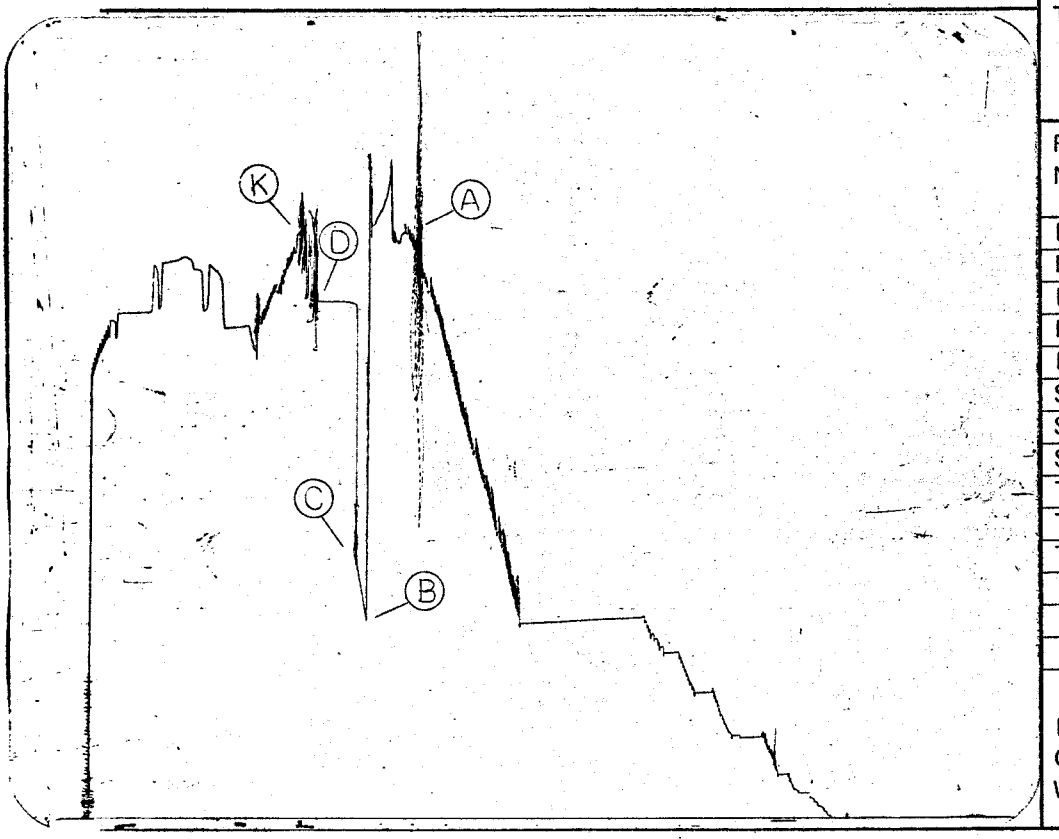
Phone
522-1206 Area 303

LYNES, INC

Box 3600
Sterling, Colo. 80751

Contractor	Universal Drlg. Co.	Top Choke	1/4"	Flow No. 1	15 Min.
Rig No.	7	Bottom Choke	1"	Shut-in No. 1	60 Min.
Spot	NW-NW	Size Hole	8 1/2"	Flow No. 2	-- Min.
Sec.	3	Size Rat Hole	--	Shut-in No. 2	-- Min.
Twp.	3 N	Size & Wt. D. P.	4 1/2" 16.60	Flow No. 3	-- Min.
Rng.	7 E	Size Wt. Pipe	--	Shut-in No. 3	-- Min.
Field	Wildcat	I. D. of D. C.	2 1/4"		
County	Summit	Length of D. C.	600'		
State	Utah	Total Depth	13970'	Bottom Hole Temp.	230°F
Elevation	7444' "K.B."	Interval Tested	12810-12860'	Mud Weight	8.9
Formation	Phosphoria	Type of Test	Inflate Straddle	Gravity	--
				Viscosity	85

Tool opened @ 2:10 PM.



Inside Recorder

PRD Make Kuster AK-1
No. 10239 Cap. 7900 @ 12820'

Press		Corrected
Initial Hydrostatic	A	5988
Final Hydrostatic	K	5976
Initial Flow	B	2040
Final Initial Flow	C	2591
Initial Shut-in	D	5307
Second Initial Flow	E	--
Second Final Flow	F	--
Second Shut-in	G	--
Third Initial Flow	H	--
Third Final Flow	I	--
Third Shut-in	J	--

Lynes Dist.: Rock Springs, Wy.
Our Tester: George Baucom
Witnessed By: Dutch Allred

Operator: The Anschutz Corp.
Address: See Distribution
Well Name and No.: Anschutz Ranch #3-1
Ticket No.: 13676
Date: 12-2-78
DST No.: 16
No. Final Copies: 13

Did Well Flow – Gas No Oil No Water No (Test was reverse circulated.)

RECOVERY IN PIPE: 4300' Water cushion (Ran 4300' ammonia & water)
Estimated 10 bbl sulfur water

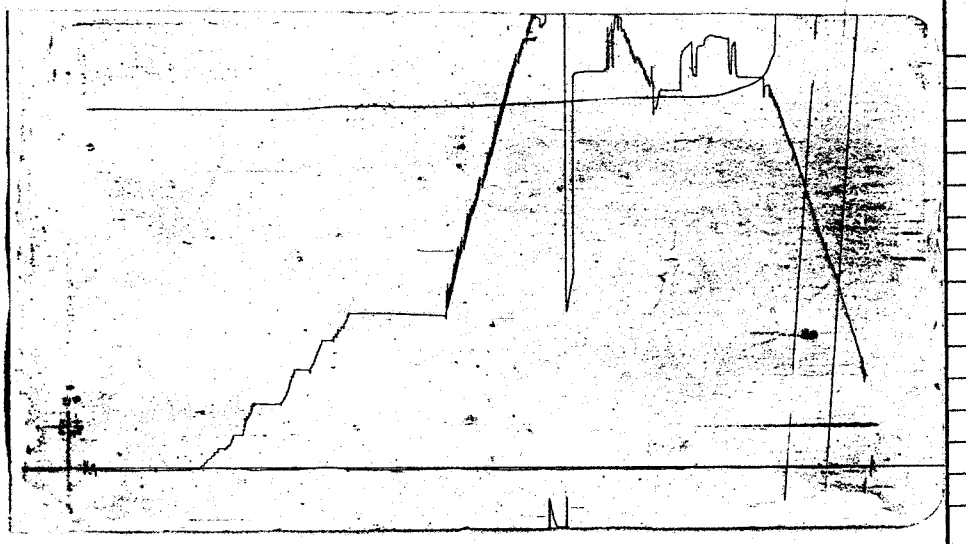
Top Sample - R.W. .2 @ 65°F = 3,800 ppm. chl.
Middle Sample - R.W. .1 @ 60°F = 85,000 ppm. chl.
Bottom Sample - R.W. 1.4 @ 65°F = 4,500 ppm. chl.

REMARKS: 1st Flow - Tool opened with a 1" underwater blow, increased to bottom of bucket in 2 1/2 minutes. Blow continued to increase to a 1.5 psig at end of flow period.

Form 1

LYNES, INC.

Operator The Anschutz Corp. Lease & No. Anschutz Ranch #3-1 DST No. 16

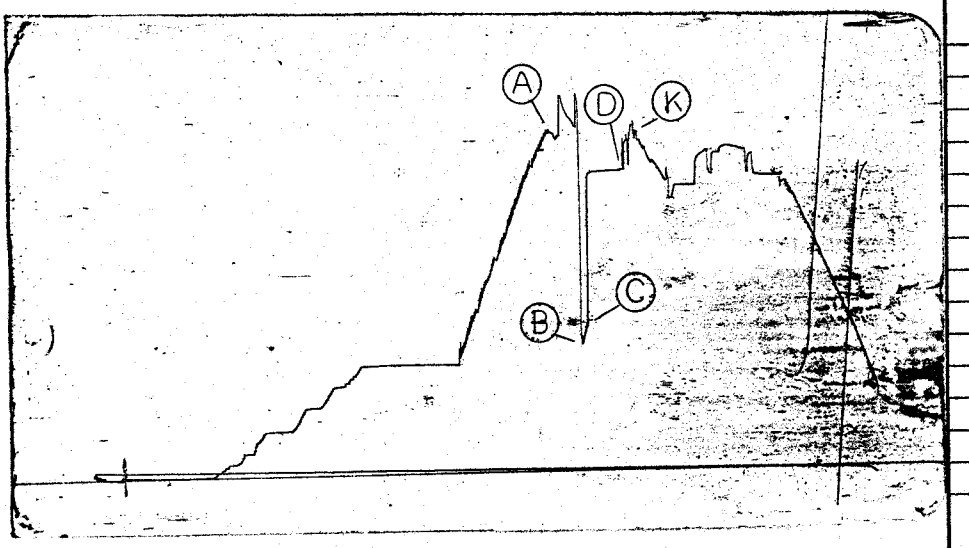


Inside Recorder

PRD Make Kuster K-3

No. 8682 Cap. 6200 @ 12778

Press		Corrected
Initial Hydrostatic	A	**
Final Hydrostatic	K	6039
Initial Flow	B	2118
Final Initial Flow	C	2596
Initial Shut-in	D	5336
Second Initial Flow	E	--
Second Final Flow	F	--
Second Shut-in	G	--
Third Initial Flow	H	--
Third Final Flow	I	--
Third Shut-in	J	--
Unreadable	**	
Pressure Below Bottom Packer Bled To		



Outside Recorder

PRD Make Kuster K-3

No. 4868 Cap. 8200 @ 12850

Press		Corrected
Initial Hydrostatic	A	6093
Final Hydrostatic	K	6081
Initial Flow	B	2324
Final Initial Flow	C	2678
Initial Shut-in	D	5383
Second Initial Flow	E	--
Second Final Flow	F	--
Second Shut-in	G	--
Third Initial Flow	H	--
Third Final Flow	I	--
Third Shut-in	J	--
Pressure Below Bottom Packer Bled To		

Form 3

LYNES, INC.

Sampler Report

Company: The Anschutz Corp. Date: 12-2-78

Well Name & No.: Anschutz Ranch #3-1 Ticket No.: 13676

County: Summit State: Utah

Test Interval: 12810-12860' DST No.: 16

Total Volume of Sampler: 2000 cc.

Total Volume of Sample: No fluid cc.

Pressure in Sampler: 0 psig

Oil: None cc.

Water: None cc.

Mud: None cc.

Gas: None cu. ft.

Other: None

Resistivity

Make Up Water 11.0 @ 75°F of Chloride Content 450 ppm.

Mud Pit Sample .26 @ 50°F of Chloride Content 36,000 ppm.

Gas/Oil Ratio _____ Gravity _____ °API @ _____ °F

Where was sample drained _____

Remarks: _____

Form 5

LYNES, INC.

Operator The Anschutz Corp. Lease & No. Anschutz Ranch #3-1 DST No. 16

Comments relative to the analysis of the pressure chart and results of DST #16, Interval: 12810-12860', which was run in the captioned well located in the NW NW Section 3, T3N-R7E, Summit County, Utah:

1. The character of the shut-in pressure build-up curve and the incremental-reading data that were furnished indicate that a maximum reservoir pressure of 5307 psi at the recorder depth of 12820 feet was recorded mechanically. This condition precludes the use of the Horner extrapolation method and analysis procedure for the calculation of numerical values for transmissibility and permeability of the tested reservoir. A measurable slope of the extrapolation plot of the shut-in pressure build-up curve is a key factor used in the basic Horner equation for calculating the above reservoir parameters. Since the maximum reservoir pressure was recorded mechanically during this test, this key factor is non-existent and it is therefore impossible to calculate numerical values for the transmissibility and permeability of the tested zone.

2. The character of the pressure record which was recorded during this test is indicative of high permeability of the tested zone.

3. Although the tool was open to flow for only 15 minutes, the estimated 10 barrels of sulfur water that were produced during this flow period indicate an Average Production Rate of 960 BPD.

4. The estimated production rate that occurred during this test, plus the character of the pressure record which was obtained, indicate that the tested reservoir has very high permeability, and it is further suggested that fracture porosity may be the predominant permeable portion of the formation which was tested.

Roger L. Hoeger
Consultant to Lynes, Inc.

Form 2

REPORT #1466

WELL NAME - ANSCHUTZ RANCH 3-1

WELL OPERATOR - THE ANSCHUTZ CORP.

DST NUMBER - 16

RECORDER NUMBER - 10239

FIRST SHUT IN PRESSURE

TIME(MIN) PHI	(T+PHI) /PHI	PSIG
.0	.0000	2591
6.0	3.5000	5293
12.0	2.2500	5301
18.0	1.8333	5305
24.0	1.6250	5305
30.0	1.5000	5306
36.0	1.4167	5306
42.0	1.3571	5307
48.0	1.3125	5307
54.0	1.2778	5307
60.0	1.2500	5307

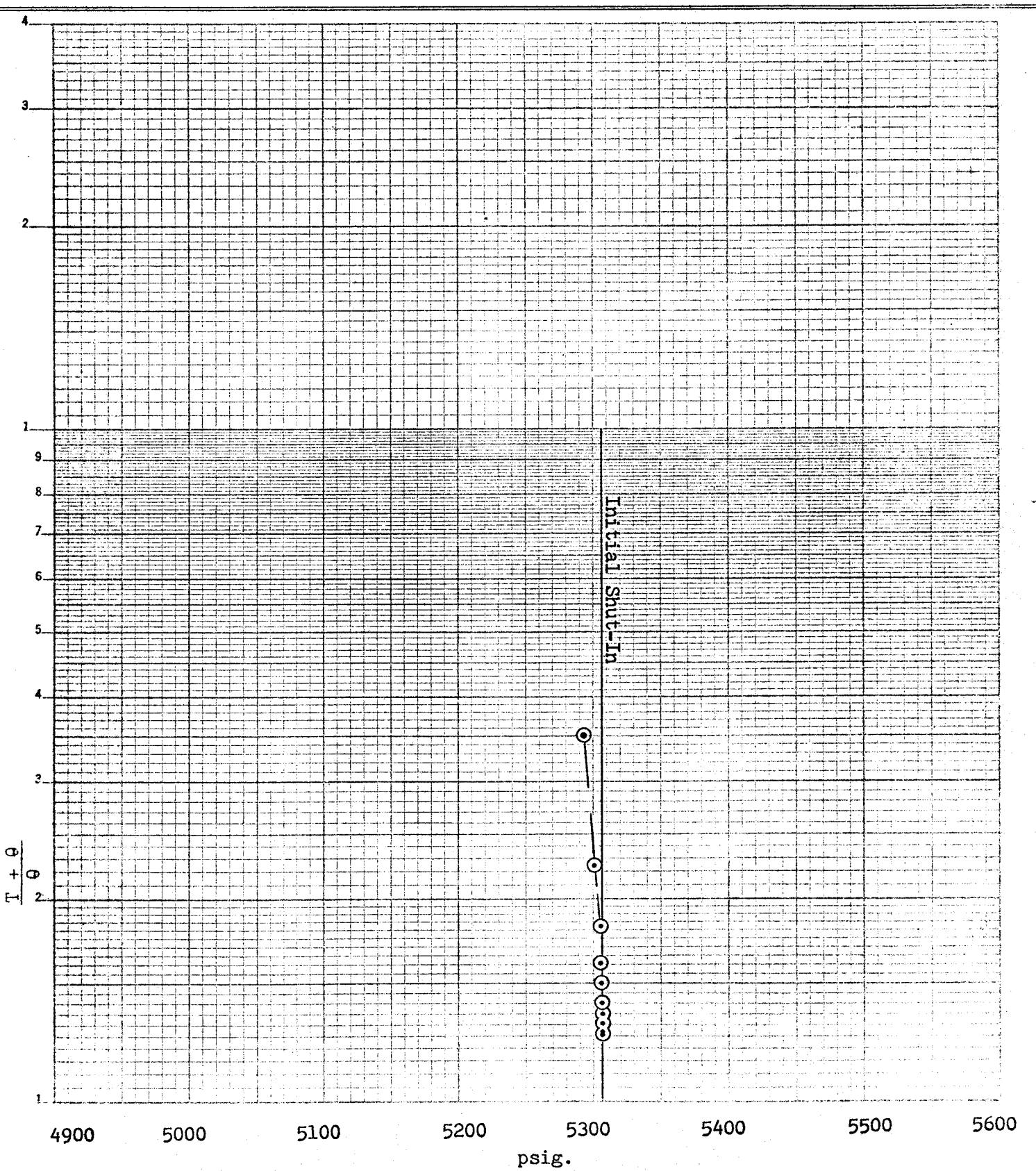
FITTED LINE: LOG((TO+PHI)/PHI) = -2.26816 PSIG + 12037.24805

EXTRAPOLATION OF FIRST SHUT IN = 5307.05 M = .44

LYNES, INC.

Pressure Extrapolation Plot

Operator The Anschutz Corp. Lease & No. Anschutz Ranch #3-1 DST No. 16



LYNES, INC.

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Original & 1 copy: The Anschutz Corp., 555 17th St., Suite 2400, Denver, CO 80202
Attn: Mr. Chas. Williams, Expl. Dept.

3 copies: Narmco, P. O. Box 283, Houston, TX 77001 Attn: Mr. Keith Hawkins

1 copy: Narmco, 732 Republic Bldg., Denver, CO 80202 Attn: Neal Harr

3 copies: Amoco Production Co., Security Life Bldg., Denver, CO 80202
Attn: Mr. Cliff Bruce

2 copies: Champlin Petroleum, P. O. Box 1257, Englewood, CO 80150
Attn: Pat Hiatt

1 copy: Ron Janc, Consulting Geologist, Room 427, Sun-Mar Motel, Evanston, WY 82930

1 copy: Utah Department of Natural Resources, Division of Oil & Gas, 1588 West North Temple, Salt Lake City, Utah 84111 Attn: Pat Driscoll

Form 6

LYNES, INC.

Distribution of Final Reports

Operator Anschutz Corp. Well Name and No. Anschutz Ranch #3-1

Original & 2 copies: Anschutz Corp., 1110 Denver Club Bldg., Denver, Colorado 80202 Attn: Mr. Phil Harrington, Exploration Dept.

3 copies: Amoco Production Co., Security Life Bldg., Denver, Colorado 80202 Attn: Mr. K.C. Beresford, Exploration Dept.

1 copy: Department of Natural Resources, Division of Oil & Gas, 1588 West North Temple, Salt Lake City, Utah 84116 Attn: Mr. Pat Driscoll

1 copy: Ronald A. Janc, Consulting Geologist, Rm. 436, Dun-May Motel Evanston, Wyoming 82930

Form 6

Phone
522-1206 Area 303

LYNES, INC

Box 712
Sterling, Colo. 80751

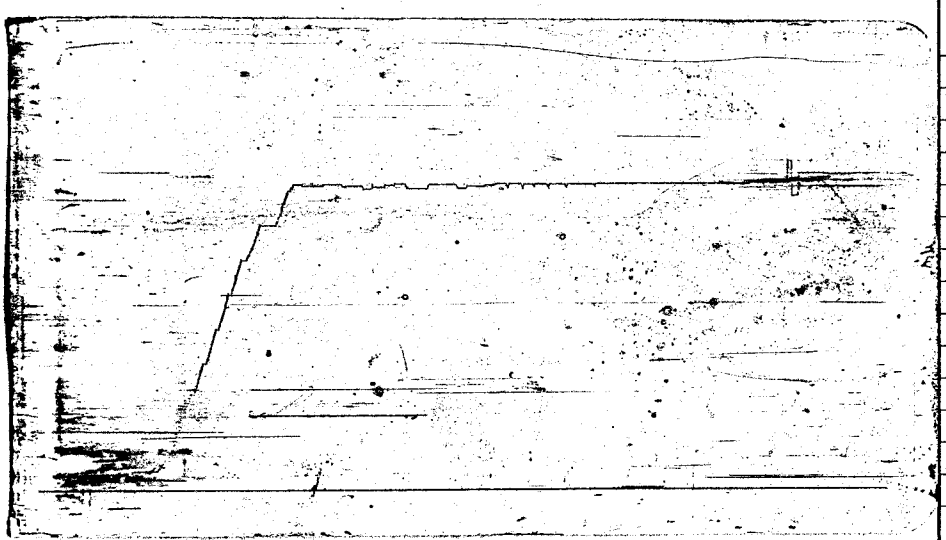
Operator Anschutz Corp.
Address See Distribution
Well Name and No. Anschutz Ranch #3-1
Ticket No. 10180
Date 4-4-78
DST No. 10
No. Final Copies 8

Contractor	Universal Drlg. Co.	Top Choke	1/4"
Rig No.	7	Bottom Choke	1"
Spot	NW - NW	Size Hole	12 1/4"
Sec.	3	Size Rat Hole	--
Twp.	3 N	Size & Wt. D. P.	4 1/2" 16.60
Rng.	7 E	Size Wt. Pipe	--
Field	Wildcat	I. D. of D. C.	2 1/4"
County	Summit	Length of D. C.	436'
State	Utah	Total Depth	8989'
Elevation	7244' "K.B."	Interval Tested	7461 - 7538'
Formation	--	Type of Test	Inflate Straddle

Flow No. 1	--	Min.
Shut-in No. 1	--	Min.
Flow No. 2	--	Min.
Shut-in No. 2	--	Min.
Flow No. 3	--	Min.
Shut-in No. 3	--	Min.

Bottom Hole Temp. --
Mud Weight 9.1
Gravity --
Viscosity 55

Tool opened @ --



Outside Recorder

PRD Make Kuster AK-3
No. 5804 Cap. 5500 @ 7467'

Press		Corrected
Initial Hydrostatic	A	--
Final Hydrostatic	K	--
Initial Flow	B	--
Final Initial Flow	C	--
Initial Shut-in	D	--
Second Initial Flow	E	--
Second Final Flow	F	--
Second Shut-in	G	--
Third Initial Flow	H	--
Third Final Flow	I	--
Third Shut-in	J	--

Lynes Dist.: Rock Springs, WY
Our Tester: Herman Coomer
Witnessed By Mark Wells

Did Well Flow – Gas No Oil No Water No
RECOVERY IN PIPE:

Misrun - No Packer Seats

REMARKS:

Form 1

Form DOGC-4

STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS AND MINING

1588 WEST NORTH TEMPLE
SALT LAKE CITY, UTAH 84116
533-5771

REPORT OF OPERATIONS AND WELL STATUS REPORT

STATE Utah COUNTY Summit FIELD/LEASE Anschutz Ranch

The following is a correct report of operations and production (including drilling and producing wells) for the month of _____, 19__.

Agent's Address 2400 Anaconda Tower
555- 17th Street
Denver, Colorado 80202
Phone No. 303-825-6100

Company The Anschutz Corporation
Signed Sonja A. Stone
Title Production Clerk

Sec. and ¼ of ¼	Twp.	Range	Well No.	Days Produced	Barrels of Oil	Gravity	Cu. Ft. of Gas (In thousands)	Gallons of Gasoline Recovered	Barrels of Water (If none, so state)	REMARKS (If drilling, depth; if shut-in, cause; if changed to producing, date; if water, amount and quality)
Sec. 3 NW NW	3N	7E	3-1							Currently Being Completed
Sec. 3 NW SE	3N	7E	3-2							Shut-In Waiting on Pipeline Connection
Sec. 28 SW SE	4N	7E	28-1							Temporarily Abandoned
Sec. 34	4N	7E	34-1							Shut-In Waiting on Pipeline Connection

GAS: (MCF)
Sold
Flared/Vented
Used On/Off Lease

OIL: (BBLS)
On hand at end of month

DRILLING/PRODUCING WELLS: This report must be filed on or before the sixteenth day of the succeeding month following production for each well. Where a well is temporarily shut-in, a negative report must be filed. *THIS REPORT MUST BE FILED*

THE ANSCHUTZ CORPORATION

DST SUMMARY

Wildcat Field

Summit County, Utah

Lease	Anschutz Ranch											
Well No.	3-1											
DST No.	1		2		3		4		5		6	
Date	2-1-78		2-4-78		2-7-78		2-9-78		2-10-78		2-12-78	
T.D.	6885'		7080		7200		7407		7407		7550	
Formation	Twin Creek		Twin Creek		Twin Creek		Twin Creek		Twin Creek		Twin Creek	
Interval Tstd.	6765-6885		6965-7080		7065-7200'		Miarum		7232-7407		Miarum	
Pay Interval	—		—		—				—			
Gauge @	6882		—		—				—			
Cushion	—											
Min/Psi IH		3152		3080		3414				3428		
IF	5	345	18	363	5	52			5	43		
ISI	30	441	35	2772*	3	72			31	174		
FF	60	338	180	459	90	70			189	46		
FSI	120	497	370	2719	180	143			180	670		
FH		3144		3250		3406				3423		
Flow BOPD/Mcfd			340	MCFD								
Recovery, Feet												
Oil												
Water												
Mud	600'	DM	640	GCDM	60	DM			90'	M		
Total												
Sampler, cc												
Oil			100	COND								
Water												
Mud			400	G&WC								
Total			500									
Psi			10									
Ft³, GOR												
Water, Rw @ 68° F												
Oil, °API @ 60° F												
DC: Ft, ID	330'	2.375	477	3 1/4	325	3.4			355	3"		
DP: Size, ID	6398'	3.826	6454	3.826	6624	3.5			6841	3.8"		
BHT, °F	132		145		130				137			
Po, kh/uB												
h, k	* ISI erroneously tool plugging											
BPD (Test/WDR)												

THE ANSCHUTZ CORPORATION

DST SUMMARY

Wildcat Field

Summit County, Utah

Lease	Anschutz Ranch					
Well No.	3-1					
DST No.	7	8	9	10	11	12
Date	2-14-78	2-18-78	3-31-78	4-4-78		
T.D.	7550	7700'	8989'	8989		
Formation	Twin Creek	Nugget Sand	Nugget Sand			
Interval Tstd.	Misrun	Misrun	7579-7650	Misrun		
Pay Interval			—			
Gauge @			7584			
Cushion						
Min/Psi IH				3706		
IF			5	122		
ISI			30	2839		
FF			60	506		
FSI			95	2839		
FH				3679		
Flow BOPD/Mcfd						
Recovery, Feet						
Oil						
Water						
Mud			1116'	SOCM		
Total						
Sampler, cc						
Oil						
Water						
Mud						
Total						
Psi						
Ft³, GOR						
Water, Rw @ 68° F						
Oil, °API @ 60° F						
DC: Ft, ID			432	2 1/4"		
DP: Size, ID			4 1/2	4.00		
BHT, °F			179°			
Po, kh/uB						
h, k						
BPD (Test/WDR)						

THE ANSCHUTZ CORPORATION

DST SUMMARY

Wildcat Field

Summit County, Utah

Lease	Anschutz Ranch											
Well No.	3-1											
DST No.	13		14		15		12		16		17	
Date	10-24-78		11-8-78		11-11-78		10-22-78		12-2-78		12-3-78	
T.D.	12,228		13010		13010		12,224'		13,970		13,970	
Formation	Dinwoody		Phosphoria		Phosphoria		Dinwoody		Phosphoria		Phosphoria	
Interval Tstd.	12,125-12,228		12858-13010		12890-13010		12160-12,224		12810-12860		12,502-12,515	
Pay Interval	—		—		—		—		—		—	
Gauge @	6090		12,804'		12,920'		12,221		12,820		—	
Cushion	100'		500' ammonia water				450' ammonia water		4300 ammonia water		Misrun	
Min/Psi IH		5791		5897		6016		5730		5988		
IF	6	214		4895		4017	7	471	15	2591		
ISI	31	358		5264		5344	59	1303	60	5307		
FF	60	222					60	436				
FSI	90	292					90	829				
FH		5789		5891		6012		5716		5976		
			Misrun									
Flow BOPD/Mcfd												
Recovery, Feet							None					
Oil												
Water									10 B	Sulphur		
Mud	186	M										
Total												
Sampler, cc							None		None			
Oil												
Water												
Mud												
Total												
Psi												
Ft³, GOR												
Water, Rw @ 68° F			.34@50°F						1.4 @ 65°			
Oil, °API @ 60° F												
DC: Ft, ID	600	2.25"	500'	2¼			558'	2.50"	600'	2¼"		
DP: Size, ID	11498	3.826"	4½	16.60			11468'	3.826"	4½	16.60		
BHT, °F	192°		236°				223°		230°			
Po, kh/uB												
h, k												
BPD (Test/WDR)												

THE ANSCHUTZ CORPORATION

DST SUMMARY

Wildcat Field

Summit County, Utah

Lease												
Well No.	3-1		3-1									
DST No.	18		19									
Date	12-6-78		12-10-78									
T.D.	13,970		13,970									
Formation	Upper Phosphoria		Dinwoody									
Interval Tstd.	12,502-12,515		12,242-12,338									
Pay Interval	—		—									
Gauge @	12,510'		12,215'									
Cushion	Ammonia 4300'		Ammonia 4300									
Min/Psi IH		5795		5629								
IF	15	1837	30	1931								
ISI	60	5146	90	3303								
FF												
FSI												
FH		5725		5629								
Flow BOPD/Mcfd		None		None								
Recovery, Feet												
Oil												
Water	With Cushion	4300'	With Cushion	4300'								
Mud												
Total												
Sampler, cc												
Oil				0								
Water				0								
Mud				2000								
Total		2000		2000								
Psi												
Ft³, GOR												
Water, Rw @ 68° F	.75 @ 70°		1.2 @ 50°									
Oil, °API @ 60° F												
DC: Ft, ID	630'	2 1/4"	603'	2 1/4"								
DP: Size, ID	4 1/2	16.60	4 1/2	16.60								
BHT, °F	195°		176°									
Po, kh/uB												
h, k												
BPD (Test/WDR)												

Form OGCC-3

4

STATE OF UTAH

OIL & GAS CONSERVATION COMMISSION

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

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

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

2. NAME OF OPERATOR: The Anschutz Corporation

3. ADDRESS OF OPERATOR: 555 17th st., Stuie 2400, Denver, CO 80202

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

At surface: 746' FNL & 1012' FWL

At top prod. interval reported below: 650' FNL & 975' FWL

At total depth: 166' FNL & 970' FWL

5. LEASE DESIGNATION AND SERIAL NO.: Fee

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Anschutz Ranch

9. WELL NO.: 3-1

10. FIELD AND POOL, OR WILDCAT: Anschutz Rnch-Twin Crk

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec. 3-T3N-R7E

14. PERMIT NO. API 43-043-3--58 | DATE ISSUED 7-18-79

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

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
11-13-77	11-28-78	4-30-79	7237' GR (graded)	7237'

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
13,970' MD 13,927' TVD	7364' (7361' TVD)		→	0-13,970'	none

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: Twin Creek 6672-7297 (6670-7294' TVD)

25. WAS DIRECTIONAL SURVEY MADE: yes

26. TYPE ELECTRIC AND OTHER LOGS RUN: SP-DLL-GR, BHC-Sonic-GR, CNL-FDC-GR, Dipmeter, Velocity Surv

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
13-3/8	54.5	1596	17½	1350 sx	none
9-5/8	43.5 & 47	11,278	12¼	1100 sx (11278'-9000')	none
				8800 sx thru DV tool	
				@ 7142-5000'	

29. LINER RECORD

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

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-7/8	6575	6575

31. PERFORATION RECORD (*Interval, size and number*)

7446-7522 (15 holes) plugged back
7204-7297 (44 holes) @ 7418'
6926-7120 (66 holes)
6810-6884 (33 holes)
6672-6784 (52 holes)

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
7446-7522	3000 gal 15% HCL acid
7364-7384	Sqeeze w/375 sx cement
6672-7297	49500 gal 15% HCl acid

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
2-17-79	Flowing	Shut-in

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
3-20-79	20	1"	→	-	385		

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
575	0	→	-	385	-	-

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

TEST WITNESSED BY: T. AURELIUS

35. LIST OF ATTACHMENTS: Directional Survey, DST Summaries

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

SIGNED Wayne C. Pierce TITLE Operations Manager DATE 8-10-79

Wayne C. Pierce

*(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.
Twin Creek	6,060	7,602	Black & gray calcareous shale with thin shaley limestones. Gas bearing fracture porosity
Nugget	7,602	8,670	Salmon colored sandstone. Cross bedded, dolomitic or calcareous. Water bearing.
Dinwoody	11,908	12,350	Medium to dark gray shales and siltstones. Tight
Phosphoria	12,350	13,920	Shale dark gray to black with inter bedded siltstone and limestone at top grading to shale & interbedded dolomite near bottom. Tight.
Weber	13,920	T.D.	Sandstone white to light gray with interbedded dolomites. Water bearing.

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
Pruess Salt	5964	5963
Twin Creek	6060	6059
(Leeds Crk)	6643	6641
(Walton Crk)	6760	6758
(Boundary Butte)	7124	7122
(Rich)	7175	7173
(Slide Rock)	7442	7439
Nugget	7602	7599
Ankarah	8670	
Thaynes	10,140	
Woodside	11,113	
Dinwoody	11,980	
Phosphoria	12,350	
Weber	13,920	
Total Depth	13,970	13,927

August 28, 1979

The Anschutz Dorporation
555 17th Street, Sutie 2400
Denver, Colorado 80202

Re: Anschutz Ranch Field Reservoirs
(Twin Creek & Nugget Formations)
Well No. 3-1 Anschutz Ranch
Sec. 3, T. 3N, R. 7E.,
Summit County, Utah

Dear Mr. Doty:

This letter is to confirm our telephone conversation of August 27th, in which you agreed to send a letter stating your corporation's position concerning the matter of whether or not either of the above referenced reservoirs have a retrograde condensation. It is my understanding, after discussing this matter with you, that this condition does not exist. However, Mr. Pierce said that fluid samples have been obtained and were being analyzed, and the results would be in shortly. I have requested that a copy be forwarded to this office. This would substantiate your firms positions and document the files.

We also requested additional information to explain how Well No. 3-1 was plugged back to 7418'; this information was missing on the well completion report. In the future we would like to review any plugging program prior to commencement of the operation.

Your cooperation is greatly appreciated.

Sincerely,

DIVISION OF OIL, GAS AND MINING

MICHAEL T. MINDER
GEOLOGICAL ENGINEER

MTM:btm

cc

November 14, 1979

The Anschutz Corporation
555 17th Street, Suite 2400
Denver, Colorado 80202

Re: Reservoir Status
Anschutz Ranch Field Reservoirs
Twin Creek & Nugget Formations
Summit County, Utah

Dear Mr. Pierce:

On August 28, 1979, we requested information as to the determination of whether or not the above referenced reservoirs could be classified as retrograde-condensate. You stated that fluid samples had been obtained and were being analyzed by Amoco laboratories and that copies of the analysis would be forwarded to our office.

On September 17, 1979, in a letter sent to this Division, you stated that samples were obtained from all the wells and sent to Core Laboratories in Dallas, Texas, and that by October 15, 1979, we would be informed of the results and furnished with copies of the analysis.

As of this date, we have not heard from you concerning this matter. It is essential that we receive this information prior to any production from this field. Please notify us immediately or we will be forced to require your corporation to appear before the Board of Oil, Gas and Mining to show cause why this field should not be shut-in.

Sincerely,

DIVISION OF OIL, GAS AND MINING

Michael T. Minder
Geological Engineer

MTM:btm

cc: Amoco
Champlin
Cleon B. Feight

Form OGCC-1 b

STATE OF UTAH

OIL & GAS CONSERVATION COMMISSION

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

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 [X] GAS WELL [ ] OTHER

2. NAME OF OPERATOR: The Anschutz Corporation

3. ADDRESS OF OPERATOR: 2400 Anaconda Tower, 555-17th St., Denver, Co 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 745.2' FNL and 885.2' FWL

5. LEASE DESIGNATION AND SERIAL NO.: Fee

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Anschutz Ranch

9. WELL NO.: 3-1

10. FIELD AND POOL, OR WILDCAT: Anschutz Ranch

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Section 3, T3N-R7E

14. PERMIT NO.: 43-043-30058

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 7221.8' GR

12. COUNTY OR PARISH: Summit

13. STATE: Utah

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

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	[ ]	PULL OR ALTER CASING	[ ]	WATER SHUT-OFF	[ ]	REPAIRING WELL	[ ]
FRACTURE TREAT	[ ]	MULTIPLE COMPLETE	[ ]	FRACTURE TREATMENT	[ ]	ALTERING CASING	[ ]
SHOOT OR ACIDIZE	[ ]	ABANDON*	[ ]	SHOOTING OR ACIDIZING	[ ]	ABANDONMENT*	[ ]
REPAIR WELL	[ ]	CHANGE PLANS	[ ]	(Other) Well Report			[X]
(Other)			[ ]	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

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

Spud 1200 hrs. 11/13/77.
Ran 13-3/8" csg. @ 1610'.
Ran DST #1 @ 6885'
#2 @ 7080'
#3 @ 7200'
#4 @ 7407'
#5 @ 7407'
#6 @ 7550'
#7 @ 7550'
#8 @ 7700'
Log with Schlumberger @ 8989'.
Ran DST #9 @ 8989'
#10 @ 8989'
Drilled beside fish @ 5916'.
Log with Schlumberger @ 11,304'.
Ran 905/8" csg. @ 11,278'.
Ran DST #12 @ 12,224'
#13 @ 12,228'
#14 @ 13,010'
#15 @ 13,010'

(CONTINUED ON REVERSE SIDE)

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

SIGNED David Kingston TITLE _____ DATE 2/8/82

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Instructions

General: This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law 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.

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 17: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.

(CONTINUED FROM FRONT SIDE)

Logged with Schlumberger @ 13,970'.
Ran DST #16 @ 13,970'
#17 @ 12,515'
#18 @ 12,338'
Plugs set @ 11,335', 12,294' and 13,910'.
Pump cement into perfs @ 7550'.
Rig released 2000 hrs. 12/15/78.

Form OGCC-1 b

STATE OF UTAH

OIL & GAS CONSERVATION COMMISSION

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

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.)

RECEIVED
MAY 16 1984
DIVISION OF OIL GAS & MINING

1. OIL WELL ☐ GAS WELL ☒ OTHER

2. NAME OF OPERATOR: The Anschutz Corporation

3. ADDRESS OF OPERATOR: 555 17th Street Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 746' FNL and 1012' FWL

5. LEASE DESIGNATION AND SERIAL NO.: Fee

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Anschutz Ranch

9. WELL NO.: 3-1

10. FIELD AND POOL, OR WILDCAT: Anschutz Ranch-Twin Creek

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 3- 3N- 7E

14. PERMIT NO.: 43-043-3-58

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 7237 Gr

12. COUNTY OR PARISH: Summit

13. STATE: Utah

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

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other) Plug back Procedure			☐
(Other)			☐	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

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

The following Plug back procedure was utilized to effectively isolate formations penetrated but not cased:

Date	Plug No.	Sacks of Cement	Length	Interval
12-11-78	1	35	100'	13,810'-13,910'
12-11-78	2	50	100'	12,394'-12,494'
12-11-78	3	65	100'	11,235'-11,335'

12-12-78 Set cast iron bridge Plug @ 7,800'
Perforate 4 holes @ 7,550' and squeezed with 100 Sx cement.

Note: Supplement to completion report sumitted 8-10-79

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

SIGNED Wayne C. Pierce TITLE Production Manager DATE 8-29-79

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Form OGC-1b

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

SUNDRY NOTICES AND REPORTS ON WELLS

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

5. LEASE DESIGNATION AND SERIAL NO.: FEE

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

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

7. UNIT AGREEMENT NAME:

2. NAME OF OPERATOR: The Anschutz Corporation

8. FARM OR LEASE NAME: Anschutz Ranch

3. ADDRESS OF OPERATOR: 555-17th Street, Suite 2400, Denver, Colorado 80202

9. WELL NO.: 3-1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 746' FNL, 1012' FWL, Section 3

10. FIELD AND POOL, OR WILDCAT: Anschutz Ranch

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 3-T3N-R7E

14. PERMIT NO.: 43-043-30058

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 7237' GR

12. COUNTY OR PARISH: Summit

13. STATE: Utah

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

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	[ ]	PULL OR ALTER CASING	[ ]	WATER SHUT-OFF	[ ]	REPAIRING WELL	[ ]
FRACTURE TREAT	[ ]	MULTIPLE COMPLETE	[ ]	FRACTURE TREATMENT	[ ]	ALTERING CASING	[ ]
SHOOT OR ACIDIZE	[ ]	ABANDON*	[ ]	SHOOTING OR ACIDIZING	[ ]	ABANDONMENT*	[ ]
REPAIR WELL	[ ]	CHANGE PLANS	[ ]	(Other) Change of Operator			[X]
(Other)			[ ]	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

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

This Sundry Notice is for the purpose of notifying a Change of Operator for the above referenced well. Amoco, 1670 Broadway, Denver, Colorado, 80202, is operator of this well.

RECEIVED
JUN 15 1984
DIVISION OF OIL GAS & MINING

✓ 6/16/84 P&A instructions to Amoco, Al Walker

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

SIGNED W. Randall Miller TITLE Operations Coordinator DATE June 11, 1984

W. Randall Miller

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

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.)

RECEIVED
OCT 19 1984
DIVISION OF OIL GAS & MINING

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

2. NAME OF OPERATOR: AMOCO PRODUCTION COMPANY

3. ADDRESS OF OPERATOR: P.O. BOX 829 EVANSTON, WYOMING 82930

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface: 746' FNL & 1012' FWL

5. LEASE DESIGNATION AND SERIAL NO.: Fee

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Anschutz Ranch

9. WELL NO.: 3-1

10. FIELD AND POOL, OR WILDCAT: Anschutz Ranch

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 3, T3N, R7E

14. PERMIT NO.: 43-043-30058

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 7222' GL

12. COUNTY OR PARISH: Summit

13. STATE: Utah

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

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	[ ]	PULL OR ALTER CASING	[ ]	WATER SHUT-OFF	[ ]	REPAIRING WELL	[ ]
FRACTURE TREAT	[ ]	MULTIPLE COMPLETE	[ ]	FRACTURE TREATMENT	[ ]	ALTERING CASING	[ ]
SHOOT OR ACIDIZE	[ ]	ABANDON*	[X]	SHOOTING OR ACIDIZING	[ ]	ABANDONMENT*	[ ]
REPAIR WELL	[ ]	CHANGE PLANS	[ ]	(Other) P & A			[ ]
(Other)			[ ]	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

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

The Amoco Anschutz 3-1 will be plugged and abandoned because the well is no longer commercially productive. The well is plugged back to 7364', with open perforations in the Twin Creek formation from 6672' to 7297'. The open perforations will be squeezed with 50 sacks of Class "G" cement. A cement retainer will be set at 6570' (102' above the perforations) to set a 285 sack plug across the perforations and 100' above them. The well will be filled with mud to 1700' and another 72 sack plug will be set from 1700'-1500' to isolate the surface casing set at 1600'. A 36 sack plug will be set from the surface to 100' and a 4" x 10' dry hole marker with 4' extending will embedded in the cement.

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
DATE: 10/23/84
BY: John R. Baza

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

SIGNED Vann E. Prater TITLE District Engineer DATE 10/17/84

(This space for Federal or State office use)

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

*See Instructions on Reverse Side

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

May 3, 1985

Amoco Production Company
P.O. Box 829
Evanston, Wyoming 82930

Gentlemen:

Re: Well No. Anschutz Ranch 3-1 - Sec. 3, T. 3N., R. 7E.
Summit County, Utah - API #43-043-30058

On your Producing Entity Action Form received by this office April 29, 1985 you requested that the above well be deleted from the production report. In checking with your office, we were notified that this well has been plugged and abandoned. We have reviewed our records and this office has not received a subsequent report of plugging and abandonment on this well.

Please complete and return the enclosed Form OGC-1b, "Sundry Notices and Reports on Wells" as soon as possible but not later than May 17, 1985.

Thank you for your prompt attention to thi matter.

Sincerely

Pam Kenna

Pam Kenna
Well Records Specialist

cj
cc: Dianne R. Nielson
R. J. Firth
John R. Baza
File
0063S-37

Form OGC-1b

SUBMIT IN TRIPLICATE (Other instructions on reverse side)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

2. NAME OF OPERATOR: AMOCO PRODUCTION COMPANY

3. ADDRESS OF OPERATOR: P. O. BOX 829, EVANSTON, WYOMING 82930

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 746' FNL & 1012' FWL

5. LEASE DESIGNATION AND SERIAL NO.: Fee

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Anschutz Ranch East

9. WELL NO.: 3-1

10. FIELD AND POOL, OR WILDCAT: Anschutz Ranch

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 3, T3N, R7E

12. COUNTY OR PARISH: Summit

13. STATE: Utah

14. PERMIT NO.: 43-043-30058

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 7222' GL

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

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	[ ]	PULL OR ALTER CASING	[ ]	WATER SHUT-OFF	[ ]	REPAIRING WELL	[ ]
FRACTURE TREAT	[ ]	MULTIPLE COMPLETE	[ ]	FRACTURE TREATMENT	[ ]	ALTERING CASING	[ ]
SHOOT OR ACIDIZE	[ ]	ABANDON*	[ ]	SHOOTING OR ACIDIZING	[ ]	ABANDONMENT*	[ ]
REPAIR WELL	[ ]	CHANGE PLANS	[ ]	(Other)			[ ]
(Other)			[ ]	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

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

The above referenced well is not plugged and abandoned.
The well is presently being evaluated for a potential water disposal well.

RECEIVED
MAY 13 1985
DIVISION OF OIL, GAS & MINING

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

SIGNED [signature] TITLE District Drilling Engineer DATE 5/9/85

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Form OGC-1b

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUBMIT IN TRIPLICATE (Other instructions on reverse side)

4

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 [X] GAS WELL [ ] OTHER

2. NAME OF OPERATOR: AMOCO PRODUCTION COMPANY

3. ADDRESS OF OPERATOR: P. O. BOX 829, EVANSTON, WYOMING 82930

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 746' FNL & 1012' FWL

5. LEASE DESIGNATION AND SERIAL NO.: Fee

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Anschutz Ranch East

9. WELL NO.: 3-1

10. FIELD AND POOL, OR WILDCAT: Anschutz Ranch

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 3, T3N, R7E

12. COUNTY OR PARISH: Summit

13. STATE: Utah

14. PERMIT NO.: 43-043-30058

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 7222' GL

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

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

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

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

The above referenced well is not plugged and abandoned. The well is presently being evaluated for a potential water disposal well.

RECEIVED
MAY 13 1985
DIVISION OF OIL, GAS & MINING

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

SIGNED [signature] TITLE District Drilling Engineer DATE 5/9/85

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

UTAH
NATURAL RESOURCES
Oil, Gas & Mining

355 West North Temple 3 Triad Center, Suite 350 Salt Lake City, UT 84180-1203 (801) 538-5340

DOGM 56 64 23
(In original Optimization entitling m

PRODUCING ENTITY ACTION FORM

Operator Name: Amoco Production Company Utah Account No. N0050
Address: P.O. Box 829
City: Evanston, Wyoming State: Wyoming Zip: 82930

Authorized Signature: Louis F. Lozzie Print Name: Louis F. Lozzie
Effective Date: 5/29/85 Telephone: (307) 789-1700

ACTION CODE

- A Establish New entity for new well(s).
- B Add new well(s) to existing entity.
- C Delete well(s) from existing entity.
- D Establish new entity for well(s) being deleted from existing entity.
- E Change well(s) from one entity to another existing entity.
- F Other (Specify using attachments if necessary)

BRACKET WELLS TO BE GROUPED TOGETHER

Action Code	Current Entity No.	New Entity No.	API No.	Well Name	Sec.	T	R	QQ	County	Producing Formation
C	01396		4304330058	Anschutz Ranch 3-1	3	03N	07E	NWNW	Summit	TWNCR
Reason for requested action: Not Amoco Production Co. operated well										
F	01410		4304330078	Fawcett & Sons #1	36	05N	07E	NENW	Summit	PSPR
Reason for requested action: To change Producing Formation from MDSN to PSPR										
Reason for requested action:										
Reason for requested action:										
Reason for requested action:										

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

June 10, 1985

Mr. Louis F. Lozzie
Amoco Production Company
P.O. Box 829
Evanston, Wyoming 82930

Re: Well No. Anschutz Ranch 3-1 - Sec. 3N., R. 7E., Sec. 3
Summit County, Utah - API #4304330058

Dear Mr. Lozzie:

Enclosed are copies of the Production Entity Action Form dated May 29, 1985 and a sundry submitted by your company dated May 9, 1985. As you can see, they are in disagreement as to whom is the operator of the above mentioned well.

As far as this Division is concerned this well is still operated by Amoco Production Company. If this is incorrect, please notify us immediately with proper written notification and we will be happy to change our records.

Your prompt attention to this matter will be greatly appreciated.

Sincerely,

Pam Kenna

Pam Kenna
Well Records Specialist

clj
Enclosures(2)
cc: Dianne R. Nielson
Ronald J. Firth
John R. Baza
File
Suspense File
"063S-29

Form OGC-1b

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

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.)

RECEIVED
DEC 05 1988
DIVISION OF OIL, GAS & MINING

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

2. NAME OF OPERATOR: AMOCO PRODUCTION COMPANY

3. ADDRESS OF OPERATOR: P. O. BOX 829, EVANSTON, WY 82930

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 746' FNL & 1012' FWL

5. LEASE DESIGNATION AND SERIAL NO.: Fee

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Anschtuz Ranch

9. WELL NO.: 3-1

10. FIELD AND POOL, OR WILDCAT: Anschutz Ranch

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 3, T3N, R7E

14. PERMIT NO.: 43-043-30058

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 7222' GL

12. COUNTY OR PARISH: Summit

13. STATE: UT

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

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	[ ]	PULL OR ALTER CASING	[ ]	WATER SHUT-OFF	[ ]	REPAIRING WELL	[ ]
FRACTURE TREAT	[ ]	MULTIPLE COMPLETE	[ ]	FRACTURE TREATMENT	[ ]	ALTERING CASING	[ ]
SHOOT OR ACIDIZE	[ ]	ABANDON*	[ ]	SHOOTING OR ACIDIZING	[ ]	ABANDONMENT*	[ ]
REPAIR WELL	[ ]	CHANGE PLANS	[ ]	(Other)			[ ]
(Other)			[ ]	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

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

The above well is currently shut-in pending possible conversion to a water disposal well

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

SIGNED Walter G. Shoffer TITLE Drilling Supervisor DATE 12-2-88

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

STATE OF UTAH

DIVISION OF OIL, GAS AND MINING

5. Lease Designation and Serial Number: FEE

SUNDRY NOTICES AND REPORTS ON WELLS

6. If Indian, Allottee or Tribe Name:

Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells. Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such proposals.

7. Unit Agreement Name:

Type of Well: OIL ☐ GAS ☒ OTHER:

8. Well Name and Number: Anschutz Ranch East #3-1

Name of Operator: Amoco Production Company

9. API Well Number: 43-043-30058

Address and Telephone Number: P.O. Box 800, Denver, CO 80202 Room 1725E

10. Field and Pool, or Wildcat: Anschutz Ranch

Location of Well

Footages: ~~746~~ 748' FNL x ~~1012~~ 885' FWL per GiGi Martinez

County: Summit

QQ, Sec., T., R., M.: Sec 3 T3N-R7E

State: Utah

CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

NOTICE OF INTENT (Submit in Duplicate)		SUBSEQUENT REPORT (Submit Original Form Only)	
X Abandonment	☐ New Construction	☒ Abandonment *	☐ New Construction
☐ Casing Repair	☐ Pull or Alter Casing	☐ Casing Repair	☐ Pull or Alter Casing
☐ Change of Plans	☐ Recompletion	☐ Change of Plans	☐ Shoot or Acidize
☐ Conversion to Injection	☐ Shoot or Acidize	☐ Conversion to Injection	☐ Vent or Flare
☐ Fracture Treat	☐ Vent or Flare	☐ Fracture Treat	☐ Water Shut-Off
☐ Multiple Completion	☐ Water Shut-Off	☐ Other	
☐ Other			
Approximate date work will start		Date of work completion	

Report results of **Multiple Completions** and **Recompletions** to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form.

* Must be accompanied by a cement verification report.

DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Please see attached procedure to Plug and Abandon.

If you need additional information you may contact Gigi Martinez (303) 830-4781.

Signature: Gigi Martinez Title: Permitting Agent Date: 9/9/97

(Space for State use only)

① The interval between plugs shall be filled with non corrosive fluid.

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING

DATE: 9/22/97

BY: John R. Baza

(See Instructions on Reverse Side)

RECEIVED SEP 11 1997 DIV. OF OIL, GAS & MINING

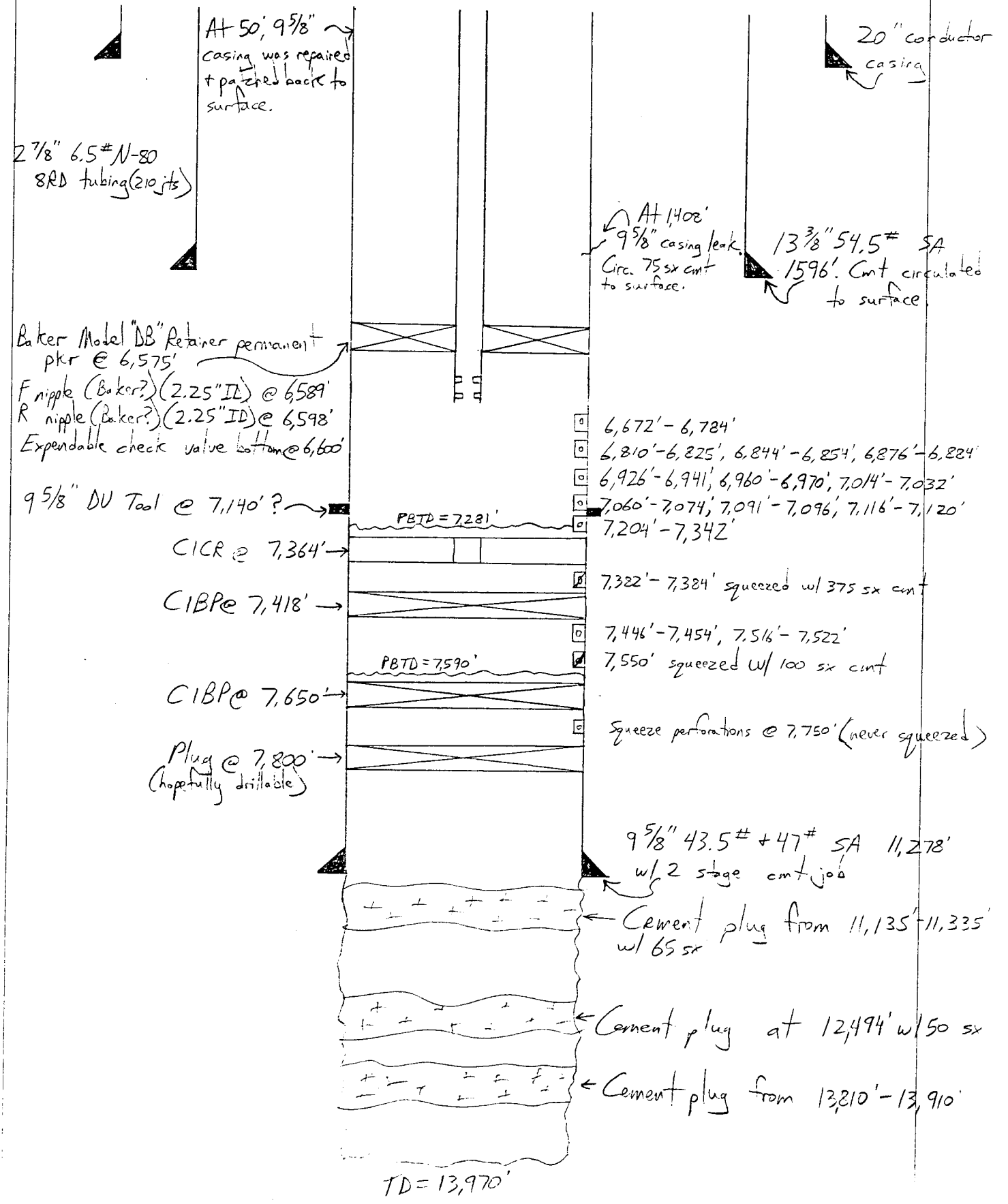
Plug and Abandon Procedure
Anschutz 3-1
NW Sec 3, T3N, R7E
746' FNL and 1012' FWL
Summit County, Utah

1) MIRU service rig
2) Kill well if necessary - Twin Creek
3) Establish Injection rate down 2 7/8" tubing still anchored in packer at 6575'
4) Pump cement down tubing to squeeze off the perfs back into the tubing above the packer. Cement volume for squeeze is figured using 1/8 Bbl per perfed foot plus the casing volume. Total volume for the squeeze will be 408 sxs - includes perfs and casing volume.
   Class G cement + .8% B14 fluid loss + .1%
   B71 retarder + .2% D65 dispersant + .2% D46 anti foamer.
5) Cut tubing above cement and pull up tubing to spot cement plug on top of packer
6) Pump 90 sxs cement on top of packer, displace tubing. TOH w/tubing
   a) 90 sxs cement from 6575' - 6325' (250' plug)
      Cement system for (3) 50 sx plugs - Class G cement + .1% B71 retarder on the first plug +.2% D65 on the first plug + 2% S1 CaCl2 on the top plug. No additives will be set in the second plug.
7) TIH with CIBP and set at 1696'. (100' below setting point of surface casing)
8) Pump 90 sxs cement on top of CIBP, displace tubing, TOH.
   b) 90 sxs cement from 1696' - 1446' (250' plug)
9) TIH setting final cement plug by pumping 90 sxs cement from 254' - 4', displace tubing. TOH with tubing.
   c) 90 sxs cement from 254' - 4' (250' plug)
10) Fill any annular void with cement
11) RDMO service rig
12) Cut casing 4' below ground level, weld on dry hole marker and cap.
13) Back fill cellar and level location.

10/25/90
RBL

Anschutz 3-1 Wellbore Diagram

Location: 746' FNL x 1012' FWL, Sect. 3, T3N, R7E
Elevation: 7237' GL / 7,259' KB



Form OGC-1a

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUBMIT IN DUPLICATE*
(Other instructions on reverse side)

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work
DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. Type of Well
Oil Well [ ] Gas Well [ ] Other Single Zone [ ] Multiple Zone [ ]

2. Name of Operator
THE ANSCHUTZ CORPORATION

3. Address of Operator
1110 Denver Club Building, Denver, Colorado 80202

4. Location of Well (Report location clearly and in accordance with any State requirements.*)
At surface
745.2' FNL & 885.2' FWL
At proposed prod. zone

5. Lease Designation and Serial No.

6. If Indian, Allottee or Tribe Name

7. Unit Agreement Name

8. Farm or Lease Name
3-1 Anschutz Ranch

9. Well No.
1

10. Field and Pool, or Wildcat
Wildcat

11. Sec., T., R., M., or Blk. and Survey or Area
NW NW 3-3N-7E

12. County or Parrish 13. State
Summit Utah

14. Distance in miles and direction from nearest town or post office*
Upton - 8 miles SW from location

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. line, if any) 745.2'

16. No. of acres in lease 640.38

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. 2500'

19. Proposed depth 16,000'

20. Rotary or cable tools Rotary

21. Elevations (Show whether DF, RT, GR, etc.)
7221.8' GR

22. Approx. date work will start*

23. PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
24"	20"	94	100'	225 sx
17-1/2"	13-3/8"	48	1,600'	400 sx
12-1/4"	9-5/8"	40-43.5	9,300'	900 sx
8-1/2"	5-1/2"	15-17	16,000'	1100 sx

We propose to drill subject well to an approximate depth of 16,000' to adequately test the subthrust Nugget sand formation. Mud and BOP programs will be those generally used in this area as in Pineview Field. No cores are planned at this time; a full suite of electric logs will be run to total depth including dipmeter-directional surveys. Drillstem tests will be run as warranted by evaluation of samples and logs. If production is encountered, casing will be set through the indicated pay-zones and selectively perforated; frac'ing or acidizing may be necessary to stimulate production.

Survey plats are attached.

Blanket drilling bond is on file.

RECEIVED
OCT 14 1997
DIV. OF OIL, GAS & MINING

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.

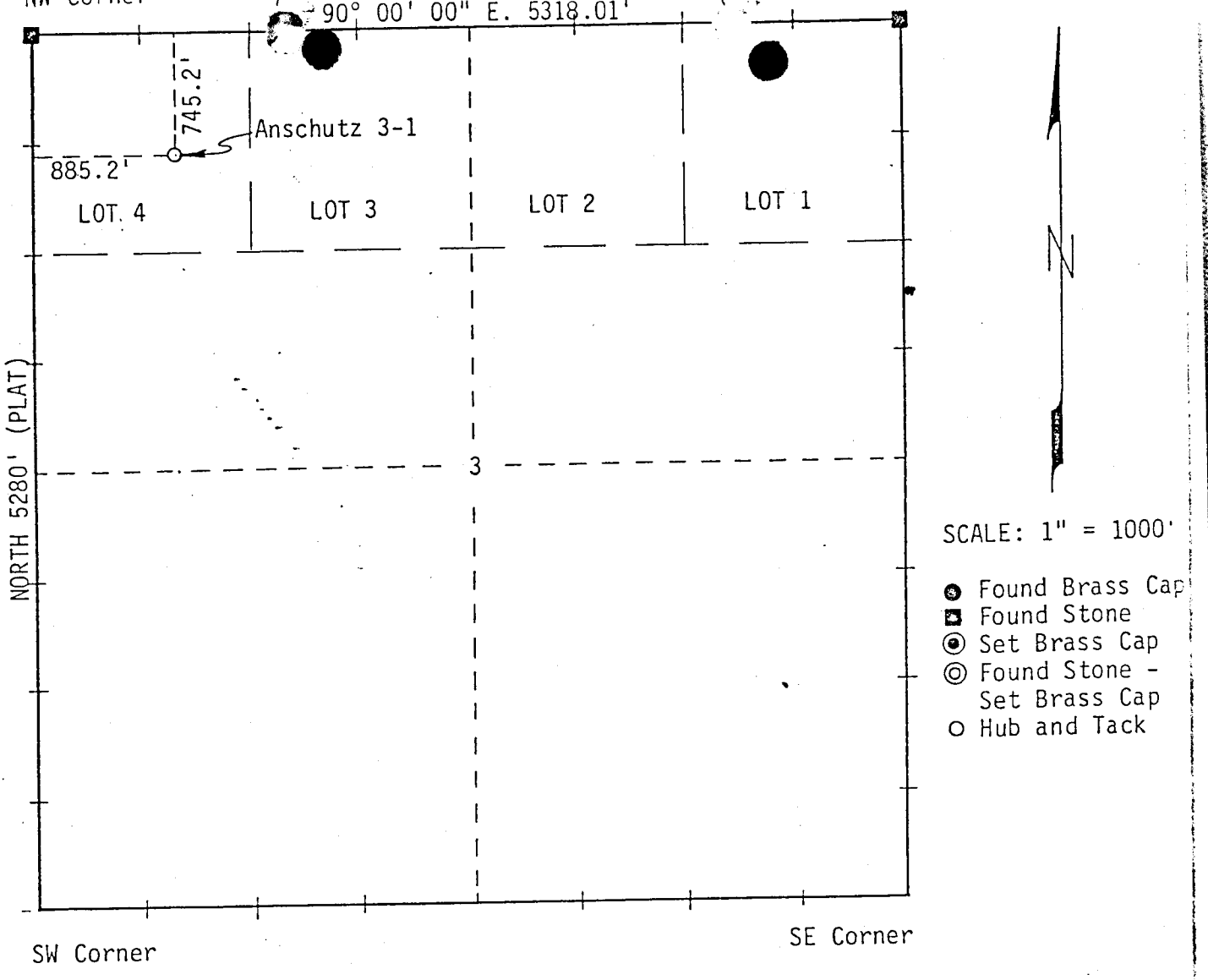
24.
Signed Wayne C. Pierce Title Operations Engineer Date 7-13-77

(This space for Federal or State office use)

Permit No. Approval Date

Approved by Title Date
Conditions of approval, if any:

*See Instructions On Reverse Side



I, John A. Proffit of Evanston, Wyoming certify that in accordance with a request from Wayne Pierce of Denver, Colorado for Anschutz Corporation I made a survey on the 1st day of June, 19 77 for Location and Elevation of the Anschutz 3-1 as shown on the above map, the wellsite is in the NW¼ NW¼ (Lot 4) of Section 3, Township 3N, Range 7E of the Salt Lake Base & Meri. Summit County, State of Utah, Elevation is 7221.8 Feet top of hub Datum U.S.G.S. Quadrangle - Castle Rock Utah - Spot Elevation 7722', SW¼ SE¼ Sec. 34, T 4 N, R 7 E, Salt Lake Base & Meridan

Reference point North 100.1' 5/8" rebar Elevation top of hub 7224.0'
Reference point East 300.1' " " " 7251.1'
Reference point South 200.0' " " " 7211.1'
Reference point West 150.2' " " " 7204.2'

John A. Proffit 6/9/77
JOHN A. PROFFIT, UTAH R.L.S. NO. 2860

UINTA ENGINEERING & SURVEYING, INC.
803 MAIN STREET, EVANSTON, WYOMING

DATE: June 9, 1977
JOB NO.: 77-101

Reverse Side

Plug and Abandon Procedure
Anschutz 3-1
NW Sec 3, T3N, R7E
746' FNL and 1012' FWL
Summit County, Utah

1)Test anchors, if needed put new ones in
2) MIRU service rig
3) Kill well if necessary, fill tbg and csg
4)ND tree, NU BOPS or hydrill. (check size of well head), need 11" double or hrdrill
5) Unsting from packer, packer at 6575', DB" , TOOH 2 7/8 eue 8rd
6)TIH Halliburton cement retainer, set at 6537' (check for csg collar)
7) Pump cement down tubing to squeeze off perfs, if no pressure, sting out with 2 bbls of slurry left in tbg. Reverse out.

Cement volume for squeeze is figured using 1/8 Bbl per perfed foot plus the casing volume. 188' perfs and 731' 9 5/8" csg. 89 bbls slurry

Total volume for thesqueeze will be 445 sxs -includes perfs and casing volume. Class G cement + .8% B14 fluid loss + .1% B71 retarder + .2% D65 dispersant + .2% D46 anti foamer.

8) Pump 90 sxs cement on top of retainer, displace tubing, leaving 250' slurry in tbg. TOH w/tubing 300', if wet, reverse out

a) 90 sxs cement from 6537' - 6256' (280' plug)
Cement system for 90 sx plugs - Class G cement + .1% B71 retarder on the first plug +.2% D65 on the first plug + 2% S1 CaCl2 on the top plug. No additives will be set in the second plug.

9) TOOH to 1696'.
10) Pump 90 sxs cement, Spot 250' plug with water.

b) 90 sxs cement from 1696' - 1446' (250' plug)11) TOOH setting final cement plug by pumping 90 sxs cement from 254' - 4',. TOH with tubing.

c) 90 sxs cement from 254' - 4' (250' plug)

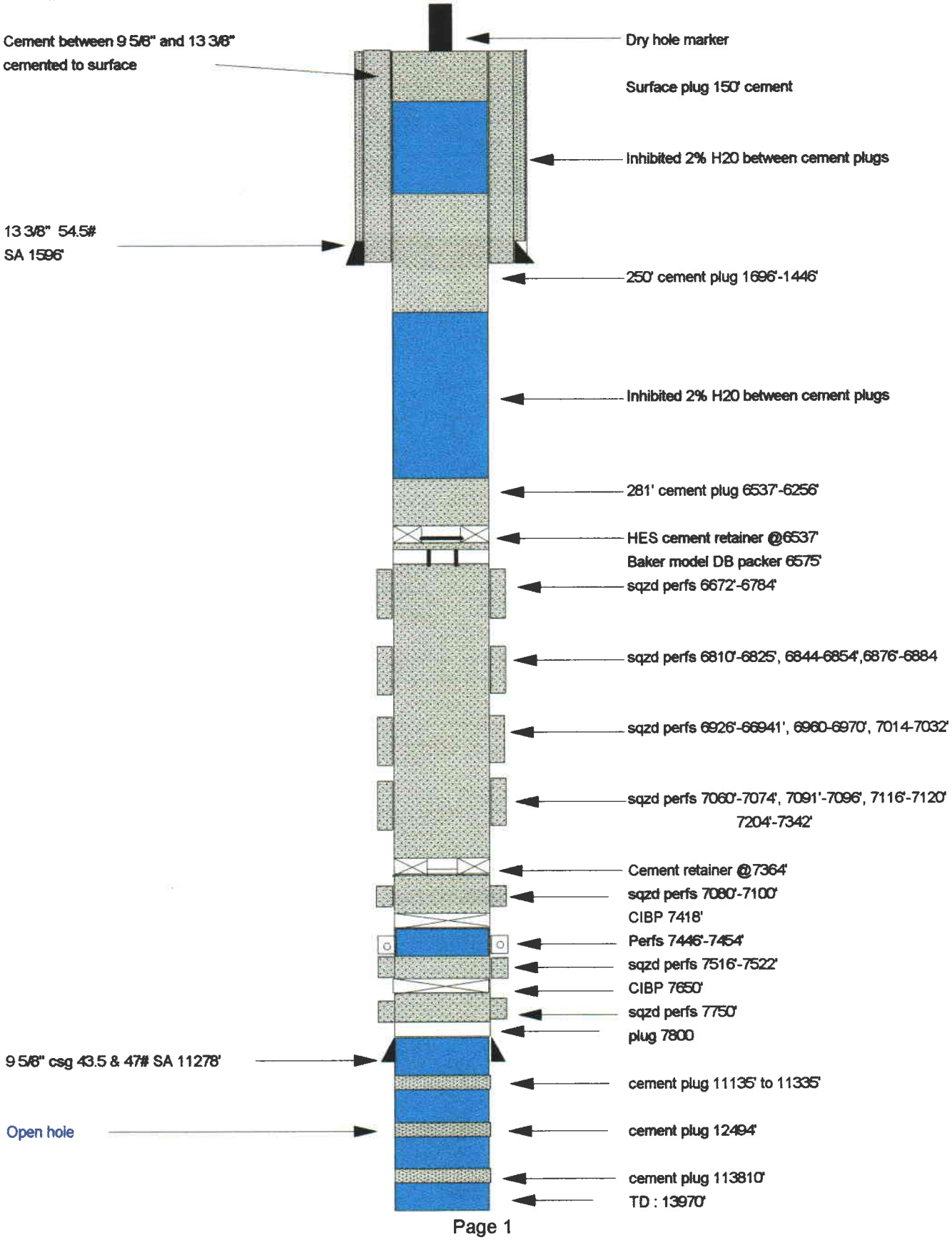
11) Fill any annular void with cement
12) RDMO service rig
13) Cut casing 4' below ground level, weld on dry hole marker and cap.
14) Back fill cellar and level location.

Sheet1

Anschutz 3-1

K.B. 7259'
G.L. 7237'
K.B. 23' FT

11/17/97



CEMENTING SERVICE REPORT

Schlumberger
Dowell
DOWELL SCHLUMBERGER INCORPORATED

DS-496-A PRINTED IN U.S.A.

TREATMENT NUMBER: 200254 99 | DATE: 11-17-97
STAGE | DS | DISTRICT: Rock Springs, WY.

WELL NAME AND NO.	Anschutz 3-1
LOCATION (LEGAL)	53 T3N R7E
FIELD-POOL	Anschutz Ranch
FORMATION	
COUNTY/PARISH	Summit
STATE	UT
API. NO.	
NAME	Amoco Production Company
AND	
ADDRESS	
ZIP CODE	
RIG NAME:	

WELL DATA:		BOTTOM			TOP
BIT SIZE	CSG/Liner Size	9 5/8			
TOTAL DEPTH	WEIGHT	43.5			
☐ ROT ☐ CABLE	FOOTAGE	7201			
MUD TYPE	GRADE	N80			
☐ BHST ☐ BHCT	THREAD	8 rd			
MUD DENSITY	LESS FOOTAGE SHOE JOINT(S)				TOTAL
MUD VISC.	Disp. Capacity				

NOTE: Include Footage From Ground Level To Head In Disp. Capacity

Float			Stage Tool		
	TYPE			TYPE	
	DEPTH			DEPTH	
SHOE	TYPE			TYPE	
	DEPTH			DEPTH	

SPECIAL INSTRUCTIONS
Plug #1
Plug #2 (250' Plug)

Head & Plugs			SQUEEZE JOB	
	☒ TBG 2 7/8 ☐ D.P.			
☐ Double	SIZE 6	TOOL	TYPE Retainer	
☐ Single	☐ WEIGHT 6.5		DEPTH 6538	
☐ Swage	☐ GRADE N80		TAIL PIPE: SIZE	DEPTH
☐ Knockoff	☐ THREAD 8 rd		TUBING VOLUME 37.81	Bbls
TOP ☐R ☐W	☐ NEW ☒ USED		CASING VOL. BELOW TOOL	Bbls
BOT ☐R ☐W	DEPTH 6538 ft		TOTAL	Bbls
	6508 ft		ANNUAL VOLUME	Bbls

IS CASING/TUBING SECURED? ☐ YES ☐ NO
LIFT PRESSURE PSI CASING WEIGHT ÷ SURFACE AREA (3.14 × R²)
PRESSURE LIMIT PSI BUMP PLUG TO PSI
ROTATE RPM RECIPROCATE FT No. of Centralizers

JOB SCHEDULED FOR TIME: 0830 DATE: 11-17 | ARRIVE ON LOCATION TIME: 0700 DATE: 11-17 | LEFT LOCATION TIME: DATE:

TIME 0001 to 2400	PRESSURE TBG. OR D.P.	PRESSURE CASING	VOLUME PUMPED BBL INCREMENT	VOLUME PUMPED BBL CUM	INJECT RATE	FLUID TYPE	FLUID DENSITY	SERVICE LOG DETAIL
8:20								PRE-JOB SAFETY MEETING
8:32								Pressure test lines 2900 psi
8:34	0	25	2	0	2 1/2	Kcl	8.3	Fill up Back Side
8:39	0	250	0	2 1/2	0	Kcl	8.3	Shut down - Hold Press
8:42	53	250	2 3/4	0	2 3/4	FW	8.3	~~Cement up in Tub~~ Pump Spacer
8:44	461	250	0	5 1/2	0	FW	8.3	Shut down - Wt Tub up w/ Cement
8:47	417	250	5	0	5	Cmt	15.8	Start pumping
9:06	220	250	5	25	5	FW	8.3	Start displacement
9:10	190	0	5	25	5	Kcl	8.3	Bleed off back side
9:15	0	0	0	35 1/2	0	Kcl	8.3	Pull up out Retainer - Pull Stand
9:25	108	100	3 1/2	0	3 1/2	Kcl	8.3	Start Pumping - Rev Out Tbg
9:40	0	0	0	50	0	Kcl	8.3	Shut down - Mix up Additives in Mix water
9:49	429	44	3	0	3	FW	8.3	Start Spacer
9:52	27		0	5	0	FW	8.3	Shut down - Wt up tub
9:53	886		5 1/4	0	5 1/4	Cmt	15.8	Start pumping
9:57	190		5 1/4	18 1/2	5 1/4	FW/Kcl	8.3	Start displacement
10:05			0	51	0	Kcl	8.3	End displacement

REMARKS

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS	SLURRY MIXED BBLS	SLURRY MIXED DENSITY
Plug - 1.	445	1.16	Class G + 0.8% B14 + 0.1% B71 + 0.2% D65 + 0.2% D46	92	15.8
Plug - 2.	90	1.16	Class G + 0.1% B71 + 0.1% D65	18 1/2	15.8
3.					
4.					
5.					
6.					

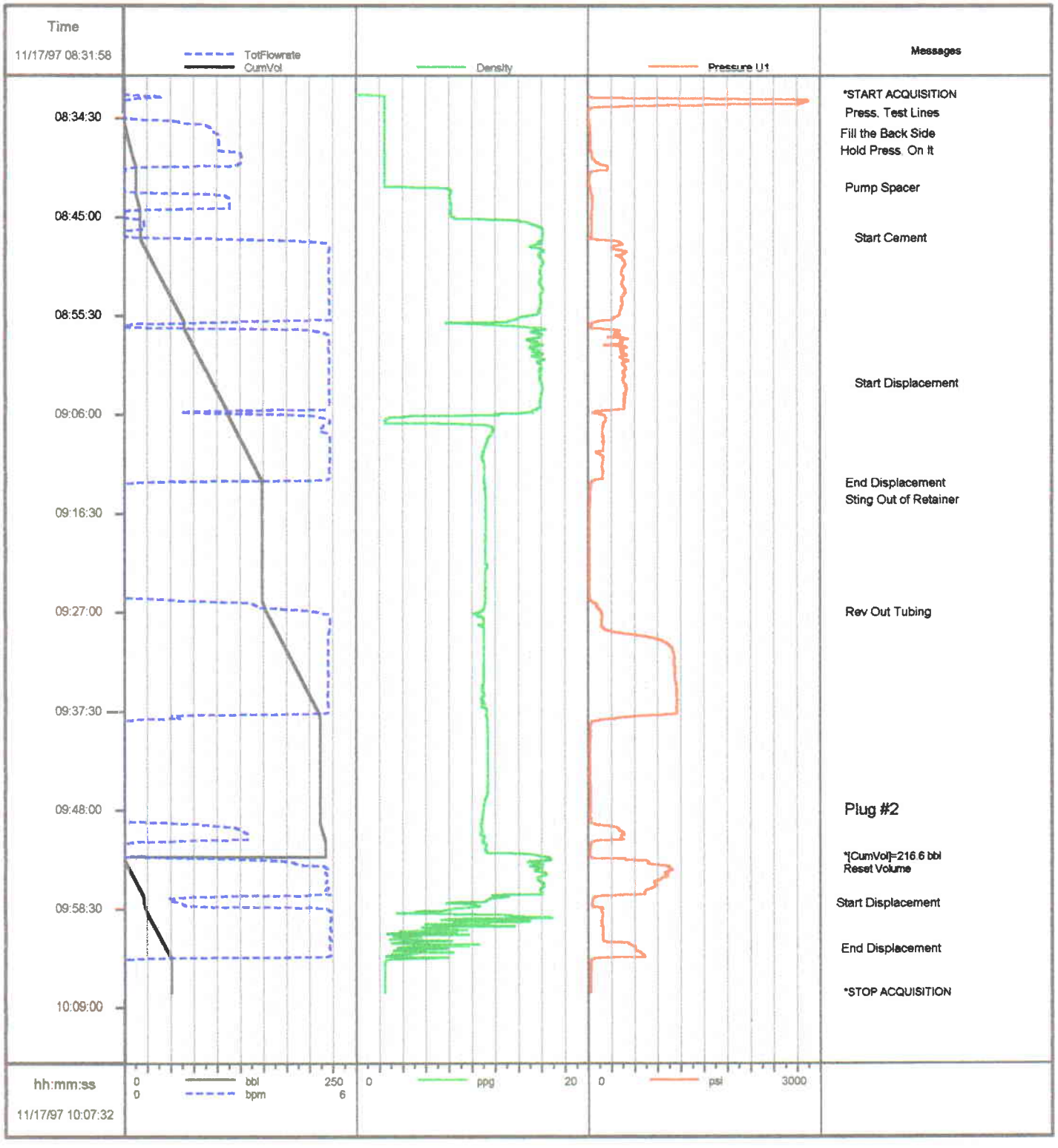
BREAKDOWN FLUID TYPE	VOLUME	DENSITY	PRESSURE MAX. MIN:
☐ HESITATION SQ. ☐ RUNNING SQ.	CIRCULATION LOST ☐ YES ☐ NO		Cement Circulated To Surf. ☐ YES ☐ NO Bbls.
BREAKDOWN PSI FINAL PSI	DISPLACEMENT VOL. Bbls		TYPE OF WELL ☐ OIL ☐ GAS ☐ STORAGE ☐ INJECTION ☐ BRINE WATER ☐ WILDCAT
Washed Thru Perfs ☐ YES ☐ NO TO FT.	MEASURED DISPLACEMENT ☐ ☐ WIRELINE		
PERFORATIONS TO TO TO TO	CUSTOMER REPRESENTATIVE Dave Norris		DS SUPERVISOR Bret Spartz

Schlumberger Dowell

Cementing Job Report

PRISM* V2.2

Well	Anschutz 3-1	Client	Amoco Production Company
Field	Anschutz Ranch	SIR No.	
Country	USA	Job Date	11/17/97 8:31:58 AM



Job: a31pa

11/17/1997 10:43

* Mark of Schlumberger

CEMENTING SERVICE REPORT

[redacted]

Dowell

DOWELL SCHLUMBERGER INCORPORATED

DS-496-A PRINTED IN U.S.A.

TICKET NUMBER 20025499 | DATE 11-17-97

STAGE | DS | DISTRICT Rock Springs, WY.

WELL NAME AND NO. Anschutz 3-1	LOCATION (LEGAL) S3T3NR7E
FIELD-POOL Anschutz Ranch	FORMATION Plug + Abandon
COUNTY/PARISH Summit	STATE UT / API. NO.

NAME Amoco Production Company

AND

ADDRESS

ZIP CODE

SPECIAL INSTRUCTIONS

Plug #3 (250')

RIG NAME:

WELL DATA:		BOTTOM				TOP
BIT SIZE	CSG/Liner Size	9 5/8				
TOTAL DEPTH	WEIGHT	43.5				
☐ ROT ☐ CABLE	FOOTAGE	7201				
MUD TYPE	GRADE	N80				
☐ BHST ☐ BHCT	THREAD	8 LT				
MUD DENSITY	LESS FOOTAGE SHOE JOINT(S)					TOTAL
MUD VISC.	Disp. Capacity					

NOTE: Include Footage From Ground Level To Head In Disp. Capacity

Float			Stage Tool		
	TYPE			TYPE	
	DEPTH			DEPTH	
SHOE	TYPE			TYPE	
	DEPTH			DEPTH	

Head & Plugs	☒ TBG ☐ D.P.	SQUEEZE JOB	
☐ Double	SIZE 2 7/8	TOOL	TYPE
☐ Single	☐ WEIGHT 6.5		DEPTH
☐ Swage	☐ GRADE N-80	TAIL PIPE: SIZE	DEPTH
☐ Knockoff	☐ THREAD 8 LT	TUBING VOLUME	Bbls
TOP ☐R ☐W	☐ NEW ☒ USED	CASING VOL. BELOW TOOL	Bbls
BOT ☐R ☐W	DEPTH 1696 - Plug 3	TOTAL	Bbls
		ANNUAL VOLUME	Bbls

IS CASING/TUBING SECURED? ☐ YES ☐ NO

LIFT PRESSURE PSI CASING WEIGHT ÷ SURFACE AREA (3.14 × R²)

PRESSURE LIMIT PSI BUMP PLUG TO PSI

ROTATE RPM RECIPROCATE FT No. of Centralizers

JOB SCHEDULED FOR TIME: 0830 DATE: 11-17 | ARRIVE ON LOCATION TIME: 0700 DATE: 11-17 | LEFT LOCATION TIME: DATE:

TIME 0001 to 2400	PRESSURE TBG OR D.P.	PRESSURE CASING	VOLUME PUMPED BBL INCREMENT	VOLUME PUMPED BBL CUM	INJECT RATE	FLUID TYPE	FLUID DENSITY	SERVICE LOG DETAIL
								PRE-JOB SAFETY MEETING
12:18	173		4 1/2	0	4 1/2	KCl	8.3	Fill Well
12:23	558		5 1/2	18	5 1/2	FW	8.3	Start Spacer
12:25	0	0	0	24	0	FW	8.3	End Spacer - Start wt Tab up
12:29	636		5	0	5	Cmt	15.8	Start Pumping
12:33	144		4 1/4	18 1/2	4 1/4	FW/KCl	8.3	Start Displacement
12:34	0		0	26	0	KCl	8.3	Shut down
15:40								Rig for Top Out
15:50	309		2	0	2	FW	8.3	Start Pump
15:53			0	4 1/2	0	FW	8.3	Shut down - Cy Full - Start wt up tub
15:59			3	0	3	Cmt	15.8	Start Pumping
15:59			0	14	0	Cmt	15.8	Shut down - Pull all but 2 jts 1" [illegible]
16:11			2	14	2	Cmt	15.8	~~Start~~ Start Pumping
16:16			0	19	0	Cmt	15.8	Shut down

REMARKS

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS	SLURRY MIXED BBLS	SLURRY MIXED DENSITY
1.					
2.					
Plug 3.	90	1.16	Class G	18 1/2	15.8
4.	120	1.16	Class G + 2% S-1	19	15.8 to 16.5
5.					
6.					

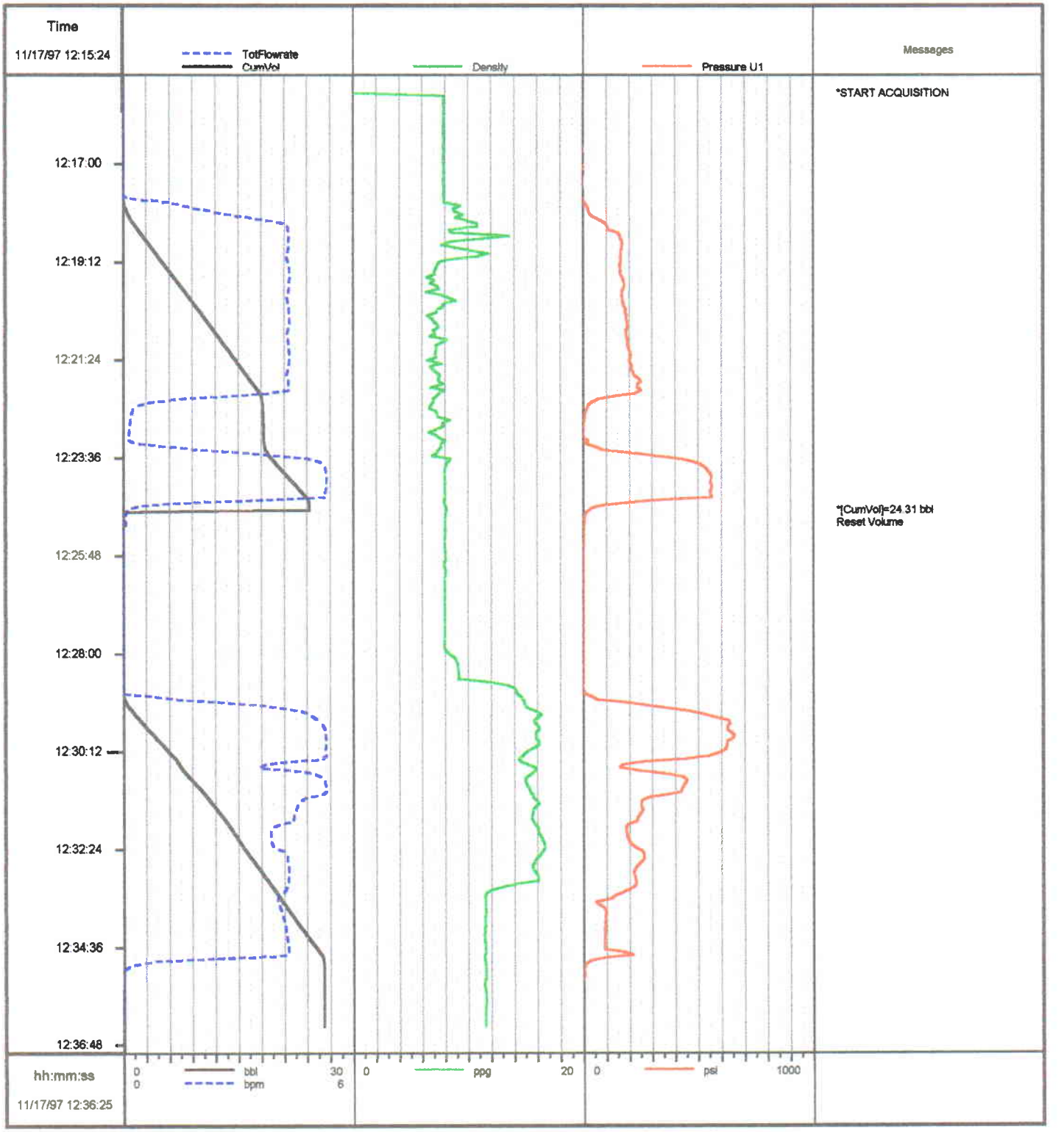
BREAKDOWN FLUID TYPE	VOLUME	DENSITY	PRESSURE MAX. MIN:
☐ HESITATION SQ. ☐ RUNNING SQ.	CIRCULATION LOST ☐ YES ☐ NO		Cement Circulated To Surf. ☐ YES ☐ NO Bbls.
BREAKDOWN PSI FINAL PSI	DISPLACEMENT VOL. Bbls		TYPE OF WELL ☐ OIL ☐ GAS ☐ STORAGE ☐ INJECTION ☐ BRINE WATER ☐ WILDCAT
Washed Thru Perfs ☐ YES ☐ NO TO FT.	MEASURED DISPLACEMENT ☐ ☐ WIRELINE		
PERFORATIONS TO TO TO TO	CUSTOMER REPRESENTATIVE Dave Norris		DS SUPERVISOR Bret Spartz

Schlumberger Dowell

Cementing Job Report

PRISM* V2.2

Well	Anschutz 3-1	**Client**	Amoco Production Company
Field	Anschutz Ranch	**SIR No.**	
Country	USA	**Job Date**	11/17/97 12:15:24 PM



Job: a31pa

11/17/1997 13:06

* Mark of Schlumberger

Form 9

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

5. Lease Designation and Serial Number: **Fee**

6. If Indian, Allottee or Tribe Name:

7. Unit Agreement Name:

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.
Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such proposals

1. Type of Well: OIL ☐ GAS ☒ OTHER ☐

8. Well Name and Number: **Anschutz Ranch East #3-1**

2. Name of Operator: **Amoco Production Company**

9. API Well Number **43-043-30058**

3. Address and Telephone Number: **P. O. Box 800, Denver CO 80201, Suite 812B 303-830-4781**

10. Field and Pool, or Wildcat: **Anschutz Ranch**

4. Location of Well
Footages: **746' FNL x 1012' FWL**
County: **Summit**
QQ, Sec., T.,R.,M.: **Sec. 3-T3N-R7E**
State: **Utah**

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

NOTICE OF INTENT (Submit in Duplicate)		SUBSEQUENT REPORT (Submit Original Form Only)	
☐ Abandonment	☐ New Construction	☒ Abandonment*	☐ New Construction
☐ Casing Repair	☐ Pull or Alter Casing	☐ Casing Repair	☐ Pull or Alter Casing
☐ Change of Plans	☐ Recompletion	☐ Change of Plans	☐ Shoot or Acidize
☐ Conversion to Injection	☐ Shoot or Acidize	☐ Conversion to Injection	☐ Vent or Flare
☐ Fracture Treat	☐ Vent or Flare	☐ Fracture Treat	☐ Water Shut-Off
☐ Multiple Completion	☐ Water Shut-Off	☐ Other	
☐ Other			
Approximate date work will start		Date of work completion **11/17/97**	
		Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form.	
		* Must be accompanied by a cement verification report.	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. 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 well was Plugged and Abandoned effective 11/17/97. Please see attached procedures and well information.

If you need additional information you may contact Gigi Martinez @ (303) 830-4781.

13. Signature: G. G. Martinez Title: **Regulatory Agent** Date: **02/25/98**

(This space for State use only)

RECEIVED
MAR 02 1998
DIV. OF OIL, GAS & MINING

(See Instructions On Reverse Side)

Plug and Abandon Procedure
Anschutz 3-1
NW Sec 3, T3N, R7E
745' FNL and 885' FWL
Summit County, Utah

1)Test anchors, if needed put new ones in
2) MIRU service rig
3) Kill well if necessary, fill tbg and csg
4)ND tree, NU BOPS or hydrill. (check size of well head), need 11" double or hrdrill
5) Unsting from packer, packer at 6575', DB" , TOOH 2 7/8 eue 8rd
6)Rig up E-line and run Halliburton cement retainer, set at 6550' (check for csg collar)
7)TIH with stinger, sting in and space out
8) Pump cement down tubing to squeeze off perfs, if no pressure, sting out with 2 bbls of slurry left in tbg. Reverse out.

. Cement volume for squeeze is figured using 1/8 Bbl per perfed foot plus the casing volume. 188' perfs and 731' 9 5/8" csg. 89 bbls slurry .

.. Total volume for thesqueeze will be 445 sxs -includes perfs and casing volume. Class G cement + .8% B14 fluid loss + .1% B71 retarder + .2% D65 dispersant + .2% D46 anti foamer.

9) Pump 90 sxs cement on top of retainer, displace tubing, leaving 250' slurry in tbg.

. TOH w/tubing 300', if wet, reverse out

a) 90 sxs cement from 6550' - 6300' (250' plug)
Cement system for 50 sx plugs - Class G cement + .1% B71 retarder on the first plug +.2% D65 on the first plug + 2% S1 CaCl2 on the top plug. No additives will be set in the second plug.

10) TOOH to 1696'.
11) Pump 90 sxs cement, Spot 250' plug with water.

b) 90 sxs cement from 1696' - 1446' (250' plug)

12) TOOH setting final cement plug by pumping 90 sxs cement from 254' - 4',. TOH with tubing.

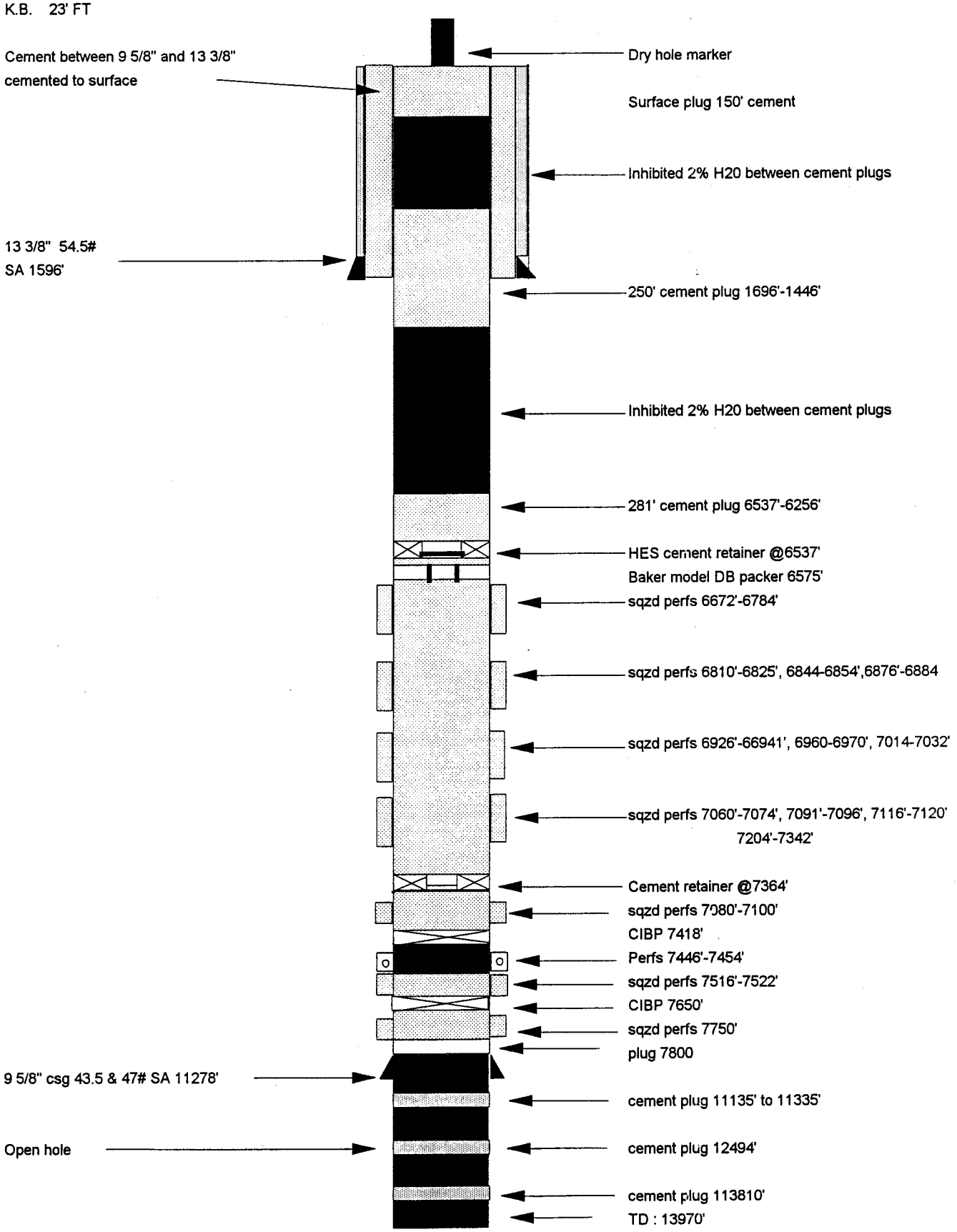
c) 90 sxs cement from 254' - 4' (250' plug)

13) Fill any annular void with cement
14) RDMO service rig
15) Cut casing 4' below ground level, weld on dry hole marker and cap.
16) Back fill cellar and level location.

Anschutz 3-1

K.B. 7259'
G.L. 7237'
K.B. 23' FT

11/17/97



AMOCO

Daily Completion Workover Report

Well Name:	ANSCHUTZ 3-1	Date:	11/12/97	Report:	1	DOL:	
Event Name:	ABANDONMENT	Start:	10/23/97	End:			

General Information

Location:		Offshore:	N	Block:	
Country:	USA			Slot:	
State/Prov:	UTAH	Spud Date:			
County:	SUMMIT	Well Type:	OTHER		
Field:	ANSCHUTZ RANCH	Well Status:			

Summary Information

Daily Cost:	600	Supervisor:	D. Norris	Final Report:	N
Cum. Cost:	600	Engineer:	C. Knight		
AFE #:		Pool:			
AFE Cost:	56,190	Zone:			
		Interval:	/		

Daily Fluids

Daily Oil Hauled On:	Cum:	Oil in Surface Tanks:	
Daily H2O Hauled On:	Cum:	H2O in Surface Tanks:	
Daily Other Hauled On:	Cum:	Other in Surface Tanks:	
Daily Oil Hauled Off:	Cum:	Oil Remaining to Recover:	
Daily H2O Hauled Off:	Cum:	H2O Remaining to Recover:	
Daily Other Hauled Off:	Cum:	Other Remaining to Recover:	
Non Recoverable Annular Oil:	Cum:		
Non Recoverable Annular H2O:	Cum:		
Non Recoverable Annular Other:	Cum:		

Safety Information

Daily Inspection:		Loss Control Incident:	
BOP Drill:		Weather Conditions:	
Safety Meeting:			
Gov't Inspection:			
Last Casing Size:	(in)	Grade:	
Last Casing Weight:	(lb/ft)	LOT EMW:	(ppg)
Set Depth:	(ft)		

Operations Summary

From	To	Hours	Code	Subcode	Code 2	Phase	Description
07:00	07:30	0.50	SAFETY		P		Hold tailgate safety meeting
07:30	18:00	10.50	RI		P		MIRUSR

Current Status: MIRUSU
24hr Summary: MIRUSU
24hr Forecast: ND tree, NU BOPs, TOOH

AMOCO

Daily Completion Workover Report

Well Name:	ANSCHUTZ 3-1	Date:	11/13/97	Report:	2	DOL:	1.00
Event Name:	ABANDONMENT	Start:	10/23/97	End:			

General Information

Location:		Offshore:	N	Block:	
Country:	USA			Slot:	
State/Prov:	UTAH	Spud Date:			
County:	SUMMIT	Well Type:	OTHER		
Field:	ANSCHUTZ RANCH	Well Status:			

Summary Information

Daily Cost:	3.400	Supervisor:	D. Norris	Final Report:	N
Cum. Cost:	4,000	Engineer:	C. Knight		
AFE #:		Pool:			
AFE Cost:	56,190	Zone:			
		Interval:	/		

Daily Fluids

Daily Oil Hauled On:	Cum:	Oil in Surface Tanks:	
Daily H2O Hauled On:	Cum:	H2O in Surface Tanks:	
Daily Other Hauled On:	Cum:	Other in Surface Tanks:	
Daily Oil Hauled Off:	Cum:	Oil Remaining to Recover:	
Daily H2O Hauled Off:	Cum:	H2O Remaining to Recover:	
Daily Other Hauled Off:	Cum:	Other Remaining to Recover:	
Non Recoverable Annular Oil:	Cum:		
Non Recoverable Annular H2O:	Cum:		
Non Recoverable Annular Other:	Cum:		

Safety Information

Daily Inspection:		Loss Control Incident:	
BOP Drill:		Weather Conditions:	
Safety Meeting:			
Gov't Inspection:			
Last Casing Size:	(in)	Grade:	
Last Casing Weight:	(lb/ft)	LOT EMW:	(ppg)
Set Depth:	(ft)		

Operations Summary

From	To	Hours	Code	Subcode	Code 2	Phase	Description
07:00	07:30		SAFETY		P	WK_REP	Hold tailgate safety meeting
07:30	14:00	6.50	NDWLHD		P	WK_REP	Pump 50 Bbls down tbg. Attempt to pull tree off. Bolts were rusted Pull 90000. Tree would still not come. Call for welder
14:00	17:30	3.50	NDWLHD		P	WK_REP	Cut bolts. ND tree, NU BOPs

Current Status: ND tree, NU BOPs,

24hr Summary:

24hr Forecast: TOOH

AMOCO

Daily Completion Workover Report

Well Name:	ANSCHUTZ 3-1	Date:	11/14/97	Report:	3	DOL: 2.00	
Event Name:	ABANDONMENT	Start:	10/23/97	End:			

General Information

Location:		Offshore:	N	Block:	
Country:	USA			Slot:	
State/Prov:	UTAH	Spud Date:			
County:	SUMMIT	Well Type:	OTHER		
Field:	ANSCHUTZ RANCH	Well Status:			

Summary Information

Daily Cost:	3,496	Supervisor:	D. Norris	Final Report:	N
Cum. Cost:	7,496	Engineer:	C. Knight		
AFE #:		Pool:			
AFE Cost:	56,190	Zone:			
		Interval:	/		

Daily Fluids

Daily Oil Hauled On:	Cum:	Oil in Surface Tanks:	
Daily H2O Hauled On:	Cum:	H2O in Surface Tanks:	
Daily Other Hauled On:	Cum:	Other in Surface Tanks:	
Daily Oil Hauled Off:	Cum:	Oil Remaining to Recover:	
Daily H2O Hauled Off:	Cum:	H2O Remaining to Recover:	
Daily Other Hauled Off:	Cum:	Other Remaining to Recover:	
Non Recoverable Annular Oil:	Cum:		
Non Recoverable Annular H2O:	Cum:		
Non Recoverable Annular Other:	Cum:		

Safety Information

Daily Inspection:		Loss Control Incident:	
BOP Drill:		Weather Conditions:	
Safety Meeting:			
Gov't Inspection:			
Last Casing Size:	(in)	Grade:	
Last Casing Weight:	(lb/ft)	LOT EMW:	(ppg)
Set Depth:	(ft)		

Operations Summary

From	To	Hours	Code	Subcode	Code 2	Phase	Description
07:00	07:30		SAFETY		P	WK_REP	Hold tailgate safety meeting
07:30	12:00	4.50	TOH		P	WK_REP	Sting out of packer, TOOH
12:00	15:00	3.00	TIH		P	WK_REP	TIH w/retainer
15:00	19:00	4.00			P	WK_REP	Set retainer 6537'. Fill csg 440 bbls

Current Status: Set retainer
24hr Summary: TOOH, TIH
24hr Forecast: cement

AMOCO

Daily Completion Workover Report

Well Name:	ANSCHUTZ 3-1	Date:	11/15/97	Report:	4	DOL: 3.00	
Event Name:	ABANDONMENT	Start:	10/23/97	End:			

General Information

Location:		Offshore:	N	Block:	
Country:	USA			Slot:	
State/Prov:	UTAH	Spud Date:			
County:	SUMMIT	Well Type:	OTHER		
Field:	ANSCHUTZ RANCH	Well Status:			

Summary Information

Daily Cost:	3,800	Supervisor:	D. Norris	Final Report:	N
Cum. Cost:	11,296	Engineer:	C. Knight		
AFE #:		Pool:			
AFE Cost:	56,190	Zone:			
		Interval:	/		

Daily Fluids

Daily Oil Hauled On:	Cum:	Oil in Surface Tanks:	
Daily H2O Hauled On:	Cum:	H2O in Surface Tanks:	
Daily Other Hauled On:	Cum:	Other in Surface Tanks:	
Daily Oil Hauled Off:	Cum:	Oil Remaining to Recover:	
Daily H2O Hauled Off:	Cum:	H2O Remaining to Recover:	
Daily Other Hauled Off:	Cum:	Other Remaining to Recover:	
Non Recoverable Annular Oil:	Cum:		
Non Recoverable Annular H2O:	Cum:		
Non Recoverable Annular Other:	Cum:		

Safety Information

Daily Inspection:		Loss Control Incident:	
BOP Drill:		Weather Conditions:	
Safety Meeting:			
Gov't Inspection:			
Last Casing Size:	(in)	Grade:	
Last Casing Weight:	(lb/ft)	LOT EMW:	(ppg)
Set Depth:	(ft)		

Operations Summary

From	To	Hours	Code	Subcode	Code 2	Phase	Description
07:00	07:30		SAFETY		P	WK_REP	Hold tailgate safety meeting
07:30	15:00	7.50			P	WK_REP	Attempt to pump cement. Hopper was froze off. Could not get enough cement.

Current Status: wait on cement

24hr Summary:

24hr Forecast: cement

AMOCO

Daily Completion Workover Report

Well Name:	ANSCHUTZ 3-1	Date:	11/17/97	Report:	5	DOL: 4.00	
Event Name:	ABANDONMENT	Start:	10/23/97	End:			

General Information

Location:		Offshore:	N	Block:	
Country:	USA			Slot:	
State/Prov:	UTAH	Spud Date:			
County:	SUMMIT	Well Type:	OTHER		
Field:	ANSCHUTZ RANCH	Well Status:			

Summary Information

Daily Cost:	32,863	Supervisor:	D. Norris	Final Report:	N
Cum. Cost:	44,159	Engineer:	C. Knight		
AFE #:		Pool:			
AFE Cost:	56,190	Zone:			
		Interval:	/		

Daily Fluids

Daily Oil Hauled On:	Cum:	Oil in Surface Tanks:	
Daily H2O Hauled On:	Cum:	H2O in Surface Tanks:	
Daily Other Hauled On:	Cum:	Other in Surface Tanks:	
Daily Oil Hauled Off:	Cum:	Oil Remaining to Recover:	
Daily H2O Hauled Off:	Cum:	H2O Remaining to Recover:	
Daily Other Hauled Off:	Cum:	Other Remaining to Recover:	
Non Recoverable Annular Oil:	Cum:		
Non Recoverable Annular H2O:	Cum:		
Non Recoverable Annular Other:	Cum:		

Safety Information

Daily Inspection:		Loss Control Incident:	
BOP Drill:		Weather Conditions:	
Safety Meeting:			
Gov't Inspection:			
Last Casing Size:	(in)	Grade:	
Last Casing Weight:	(lb/ft)	LOT EMW:	(ppg)
Set Depth:	(ft)		

Operations Summary

From	To	Hours	Code	Subcode	Code 2	Phase	Description
07:00	07:30		SAFETY		P	WK_REP	Hold tailgate safety meeting
07:30	08:30	1.00			P	WK_REP	Rig up dowell
08:30	08:45	0.25	SAFETY		P	WK_REP	Hold tailgate safety meeting
08:45	09:30	0.75	CMTPLG		P	WK_REP	Pressure test 2000. Pressure up csg 200 psi. pump 5 bbls fresh water, pump 425 sxs class G cement (92 bbls slurry). Pump 35 bbls fresh water for displacement, leaving 2 bbls in tbg. Sting out, pull 1 jt. Reverse out.
09:30	10:30	1.00			P	WK_REP	Pump 90 sxs class G cement, spoting 280' plug above retainer. Pump 36

AMOCO

Daily Completion Workover Report

Well Name: ANSCHUTZ 3-1 | Date: 11/17/97 | Report: 5 | DOL: 4.00

Event Name: ABANDONMENT | Start: 10/23/97 | End:

Operations Summary

From	To	Hours	Code	Subcode	Code 2	Phase	Description
09:30	10:30	1.00			P	WK_REP	bbls of inhibitor fluid (132)
10:30	12:10	1.67	TOH		P	WK_REP	TOOH w/153 jts 2 7/8 tbg to 1696.
12:10	13:00	0.83	CMTPLG		P	WK_REP	Spot 250' cement plug from 1696 to 1446.
13:00	14:00	1.00	TOH		P	WK_REP	TOOH with w/54 jts 2 7/8 tbg.
14:00	15:40	1.67	NDBOP		P	WK_REP	ND BOPs, cut well off
15:40	16:30	0.83	CMTPLG		P	WK_REP	Run in hole with 150' of 1" and spot 150' plug. Pull 1". Run 1" down backside of 9 5/8, pump cement
16:30	17:30	1.00			P	WK_REP	Weld on dry hole marker.

Current Status: Pump cement plug

24hr Summary:

24hr Forecast: Rig down

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SCHLUMBERGER DIRECTIONAL SURVEY

43-043-30058

ANSCHUTZ CORPORATION

ANSCHUTZ RANCH #3-1

WILDCAT

SUMMIT COUNTY,UTAH

RUN NO.	1	1600 - 9000	30-MAR-78	4172
RUN NO.	2	8794 - 11299	09-SEP-78	4577
RUN NO.	3	11288 - 13972	28-NOV-78	4774

START OF SURVEY AT 1600 FT.

RADIUS OF CURVATURE METHOD

REFERENCE JOB 6004.

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DEPTH FEET	DEVIATION DEGREES	AZIMUTH DEGREES	TRUE VERTICAL DEPTH FEET	CO-ORDINATES + NORTH - SOUTH	+ EAST - WEST	COURSE LENGTH FEET
1600.0	0.8	336.0	1600.0	0.0	0.0	0.0
1620.0	0.7	333.5	1620.0	0.2	-0.1	0.3
1640.0	0.7	331.0	1640.0	0.5	-0.2	0.5
1660.0	0.7	326.0	1660.0	0.7	-0.4	0.8
1680.0	0.7	326.0	1680.0	0.9	-0.5	1.0
1700.0	0.7	325.0	1700.0	1.1	-0.6	1.3
1720.0	0.7	309.0	1720.0	1.3	-0.8	1.5
1740.0	0.7	317.0	1740.0	1.4	-1.0	1.7
1760.0	0.7	326.0	1760.0	1.6	-1.1	2.0
1780.0	0.8	328.0	1780.0	1.8	-1.3	2.2
1800.0	0.8	314.0	1800.0	2.0	-1.4	2.5
1820.0	0.7	320.0	1820.0	2.2	-1.6	2.8
1840.0	0.7	321.0	1840.0	2.4	-1.8	3.0
1860.0	0.7	304.0	1860.0	2.6	-2.0	3.2
1880.0	0.7	316.0	1880.0	2.7	-2.1	3.5
1900.0	0.7	319.0	1900.0	2.9	-2.3	3.7
1920.0	0.9	308.0	1920.0	3.1	-2.5	4.0
1940.0	0.7	308.0	1940.0	3.3	-2.7	4.3
1960.0	0.7	322.0	1960.0	3.5	-2.9	4.5
1980.0	0.7	302.0	1980.0	3.6	-3.1	4.8
2000.0	0.9	312.0	2000.0	3.8	-3.3	5.0
2020.0	1.0	315.0	2020.0	4.0	-3.5	5.4
2040.0	1.2	345.0	2040.0	4.3	-3.7	5.7
2060.0	1.3	307.0	2060.0	4.7	-4.0	6.1
2080.0	1.5	313.0	2080.0	5.0	-4.3	6.6
2100.0	1.6	317.0	2099.9	5.4	-4.7	7.2
2120.0	1.6	312.0	2119.9	5.8	-5.1	7.7
2140.0	1.5	313.0	2139.9	6.1	-5.5	8.2
2160.0	1.5	313.0	2159.9	6.5	-5.9	8.8
2180.0	1.9	315.0	2179.9	6.9	-6.3	9.4
2200.0	1.7	309.0	2199.9	7.3	-6.8	10.0
2220.0	1.7	311.0	2219.9	7.7	-7.2	10.6
2240.0	1.7	315.0	2239.9	8.1	-7.7	11.2
2260.0	1.6	309.0	2259.9	8.5	-8.1	11.7
2280.0	1.5	308.0	2279.9	8.8	-8.5	12.3
2300.0	1.6	303.0	2299.9	9.2	-9.0	12.8
2320.0	1.5	300.0	2319.9	9.4	-9.4	13.3
2340.0	1.7	325.0	2339.8	9.8	-9.8	13.9
2360.0	1.5	318.0	2359.8	10.2	-10.2	14.4
2380.0	1.6	317.0	2379.8	10.6	-10.5	15.0
2400.0	1.6	319.0	2399.8	11.1	-10.9	15.5
2420.0	1.9	312.0	2419.8	11.5	-11.3	16.1
2440.0	2.1	323.0	2439.8	12.0	-11.8	16.8
2460.0	1.7	326.0	2459.8	12.5	-12.2	17.5
2480.0	1.9	321.0	2479.8	13.0	-12.6	18.1
2500.0	1.8	319.0	2499.8	13.5	-13.0	18.8

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DEPTH FEET	DEVIATION DEGREES	AZIMUTH DEGREES	TRUE VERTICAL DEPTH FEET	CO-ORDINATES + NORTH - SOUTH	+ EAST - WEST	COURSE LENGTH FEET
2520.0	1.8	316.0	2519.8	14.0	-13.4	19.4
2540.0	1.7	317.0	2539.8	14.4	-13.8	20.0
2560.0	2.1	315.0	2559.7	14.9	-14.3	20.7
2580.0	1.8	318.0	2579.7	15.4	-14.8	21.3
2600.0	2.1	323.0	2599.7	15.9	-15.2	22.0
2620.0	2.0	313.0	2619.7	16.5	-15.7	22.7
2640.0	1.5	317.0	2639.7	16.9	-16.1	23.3
2660.0	1.9	309.0	2659.7	17.3	-16.5	23.9
2680.0	2.1	316.0	2679.7	17.8	-17.0	24.6
2700.0	1.7	319.0	2699.7	18.3	-17.5	25.3
2720.0	1.9	319.0	2719.7	18.7	-17.9	25.9
2740.0	2.1	326.0	2739.6	19.3	-18.3	26.6
2760.0	1.7	330.0	2759.6	19.9	-18.7	27.3
2780.0	2.0	317.0	2779.6	20.4	-19.1	27.9
2800.0	1.9	317.0	2799.6	20.9	-19.5	28.6
2820.0	1.7	314.0	2819.6	21.3	-20.0	29.2
2840.0	1.9	314.0	2839.6	21.7	-20.4	29.8
2860.0	1.9	319.0	2859.6	22.2	-20.9	30.5
2880.0	1.9	317.0	2879.6	22.7	-21.3	31.2
2900.0	1.9	312.0	2899.6	23.2	-21.8	31.8
2920.0	1.6	315.0	2919.5	23.6	-22.2	32.4
2940.0	1.7	312.0	2939.5	24.0	-22.7	33.0
2960.0	1.7	315.0	2959.5	24.4	-23.1	33.6
2980.0	1.5	316.0	2979.5	24.8	-23.5	34.2
3000.0	1.6	313.0	2999.5	25.2	-23.9	34.7
3020.0	1.5	318.0	3019.5	25.6	-24.2	35.2
3040.0	1.5	326.0	3039.5	26.0	-24.6	35.8
3060.0	1.1	320.0	3059.5	26.3	-24.8	36.2
3080.0	1.5	333.0	3079.5	26.7	-25.1	36.6
3100.0	1.3	337.0	3099.5	27.2	-25.3	37.1
3120.0	1.3	335.0	3119.5	27.6	-25.5	37.5
3140.0	1.5	335.0	3139.5	28.0	-25.7	38.0
3160.0	1.5	334.0	3159.5	28.5	-25.9	38.5
3180.0	1.5	326.0	3179.5	29.0	-26.2	39.0
3200.0	1.4	325.0	3199.5	29.4	-26.4	39.5
3220.0	1.1	340.0	3219.5	29.7	-26.7	39.9
3240.0	1.1	334.0	3239.4	30.1	-26.8	40.3
3260.0	1.1	337.0	3259.4	30.5	-27.0	40.7
3280.0	1.2	334.0	3279.4	30.8	-27.1	41.1
3300.0	1.1	328.0	3299.4	31.2	-27.3	41.4
3320.0	1.1	334.0	3319.4	31.5	-27.5	41.8
3340.0	1.2	337.0	3339.4	31.9	-27.7	42.2
3360.0	1.1	333.0	3359.4	32.2	-27.8	42.6
3380.0	1.1	335.0	3379.4	32.6	-28.0	43.0
3400.0	1.1	330.0	3399.4	32.9	-28.2	43.3
3420.0	1.1	333.0	3419.4	33.3	-28.4	43.7

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DEPTH FEET	DEVIATION DEGREES	AZIMUTH DEGREES	TRUE VERTICAL DEPTH FEET	CO-ORDINATES + NORTH - SOUTH	+ EAST - WEST	COURSE LENGTH FEET
3440.0	1.4	327.0	3439.4	33.6	-28.6	44.1
3460.0	1.5	323.0	3459.4	34.0	-28.9	44.6
3480.0	1.5	331.0	3479.4	34.5	-29.2	45.2
3500.0	1.5	318.0	3499.4	34.9	-29.5	45.7
3520.0	1.4	323.0	3519.4	35.3	-29.8	46.2
3540.0	1.4	321.0	3539.4	35.7	-30.1	46.7
3560.0	1.3	320.0	3559.4	36.0	-30.4	47.1
3580.0	1.5	330.0	3579.4	36.4	-30.7	47.6
3600.0	1.5	332.0	3599.4	36.9	-30.9	48.1
3620.0	1.5	318.0	3619.4	37.3	-31.2	48.7
3640.0	1.5	325.0	3639.3	37.7	-31.5	49.2
3660.0	1.3	335.0	3659.3	38.2	-31.8	49.7
3680.0	1.9	328.0	3679.3	38.6	-32.1	50.2
3700.0	1.3	328.0	3699.3	39.1	-32.4	50.8
3720.0	1.7	319.0	3719.3	39.5	-32.7	51.3
3740.0	1.8	327.0	3739.3	40.0	-33.0	51.9
3760.0	1.5	331.0	3759.3	40.5	-33.3	52.5
3780.0	1.8	327.0	3779.3	41.0	-33.6	53.0
3800.0	1.7	331.0	3799.3	41.5	-33.9	53.6
3820.0	1.5	318.0	3819.3	42.0	-34.3	54.2
3840.0	1.8	318.0	3839.3	42.4	-34.7	54.8
3860.0	1.7	324.0	3859.3	42.9	-35.0	55.4
3880.0	1.5	319.0	3879.2	43.3	-35.4	55.9
3900.0	1.7	320.0	3899.2	43.7	-35.7	56.5
3920.0	1.5	327.0	3919.2	44.2	-36.1	57.0
3940.0	1.5	320.0	3939.2	44.6	-36.4	57.6
3960.0	1.6	318.0	3959.2	45.0	-36.7	58.1
3980.0	1.5	319.0	3979.2	45.4	-37.1	58.7
4000.0	1.5	323.0	3999.2	45.8	-37.4	59.2
4020.0	1.5	317.0	4019.2	46.2	-37.8	59.7
4040.0	1.5	326.0	4039.2	46.6	-38.1	60.2
4060.0	1.5	315.0	4059.2	47.0	-38.4	60.7
4080.0	1.5	327.0	4079.2	47.4	-38.8	61.3
4100.0	1.5	312.0	4099.2	47.8	-39.1	61.8
4120.0	1.5	326.0	4119.2	48.2	-39.4	62.3
4140.0	1.2	318.0	4139.2	48.6	-39.7	62.8
4160.0	1.5	309.0	4159.2	48.9	-40.1	63.2
4180.0	1.5	312.0	4179.1	49.3	-40.5	63.8
4200.0	1.5	318.0	4199.1	49.6	-40.8	64.3
4220.0	1.6	324.0	4219.1	50.1	-41.2	64.8
4240.0	1.0	313.0	4239.1	50.4	-41.5	65.3
4260.0	1.6	319.0	4259.1	50.7	-41.8	65.7
4280.0	2.4	314.0	4279.1	51.2	-42.3	66.4
4300.0	1.5	319.0	4299.1	51.7	-42.7	67.1
4320.0	1.5	319.0	4319.1	52.1	-43.1	67.6
4340.0	1.5	318.0	4339.1	52.5	-43.4	68.1

Schlumberger

DEPTH FEET	DEVIATION DEGREES	AZIMUTH DEGREES	TRUE VERTICAL DEPTH FEET	CO-ORDINATES + NORTH - SOUTH	+ EAST - WEST	COURSE LENGTH FEET
4360.0	1.5	315.0	4359.1	52.9	-43.8	68.7
4380.0	1.5	320.0	4379.1	53.3	-44.1	69.2
4400.0	1.4	331.0	4399.1	53.7	-44.4	69.7
4420.0	1.1	323.0	4419.1	54.1	-44.7	70.1
4440.0	1.2	321.0	4439.1	54.4	-44.9	70.5
4460.0	1.1	339.0	4459.0	54.7	-45.1	70.9
4480.0	1.1	343.0	4479.0	55.1	-45.2	71.3
4500.0	1.1	342.0	4499.0	55.4	-45.3	71.6
4520.0	1.1	345.0	4519.0	55.8	-45.4	72.0
4540.0	1.0	346.0	4539.0	56.2	-45.5	72.3
4560.0	1.1	344.0	4559.0	56.5	-45.6	72.6
4580.0	0.7	3.0	4579.0	56.8	-45.7	72.9
4600.0	1.1	359.0	4599.0	57.1	-45.7	73.2
4620.0	1.5	2.0	4619.0	57.6	-45.7	73.5
4640.0	1.3	354.0	4639.0	58.1	-45.7	73.9
4660.0	1.5	357.0	4659.0	58.6	-45.7	74.3
4680.0	1.3	350.0	4679.0	59.1	-45.8	74.7
4700.0	1.0	357.0	4699.0	59.5	-45.8	75.1
4720.0	1.0	356.0	4719.0	59.8	-45.8	75.4
4740.0	0.8	351.0	4739.0	60.1	-45.9	75.6
4760.0	0.9	8.0	4759.0	60.4	-45.9	75.9
4780.0	0.8	359.0	4779.0	60.7	-45.9	76.1
4800.0	0.7	5.0	4799.0	61.0	-45.9	76.3
4820.0	0.7	14.0	4819.0	61.2	-45.8	76.5
4840.0	1.0	24.0	4839.0	61.5	-45.7	76.6
4860.0	1.2	18.0	4859.0	61.8	-45.6	76.8
4880.0	0.9	21.0	4879.0	62.2	-45.5	77.0
4900.0	1.1	15.0	4899.0	62.5	-45.4	77.2
4920.0	1.1	20.0	4919.0	62.9	-45.2	77.5
4940.0	1.2	18.0	4939.0	63.3	-45.1	77.7
4960.0	1.5	6.0	4959.0	63.7	-45.0	78.0
4980.0	1.3	352.0	4979.0	64.2	-45.0	78.4
5000.0	1.1	358.0	4999.0	64.6	-45.1	78.8
5020.0	1.3	345.0	5018.9	65.0	-45.1	79.2
5040.0	1.2	346.0	5038.9	65.5	-45.2	79.6
5060.0	1.5	350.0	5058.9	65.9	-45.3	80.0
5080.0	1.1	352.0	5078.9	66.4	-45.4	80.4
5100.0	0.7	334.0	5098.9	66.7	-45.5	80.7
5120.0	0.7	4.0	5118.9	66.9	-45.5	80.9
5140.0	0.7	356.0	5138.9	67.1	-45.5	81.1
5160.0	0.7	5.0	5158.9	67.4	-45.5	81.3
5180.0	0.8	4.0	5178.9	67.6	-45.5	81.5
5200.0	1.0	10.0	5198.9	68.0	-45.5	81.8
5220.0	0.5	358.0	5218.9	68.2	-45.4	82.0
5240.0	0.7	19.0	5238.9	68.4	-45.4	82.1
5260.0	0.6	1.0	5258.9	68.6	-45.4	82.3

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REF 6004.

DEPTH FEET	DEVIATION DEGREES	AZIMUTH DEGREES	TRUE VERTICAL DEPTH FEET	CO-ORDINATES + NORTH - SOUTH	+ EAST - WEST	COURSE LENGTH FEET
5280.0	0.7	3.0	5278.9	68.9	-45.3	82.5
5300.0	0.7	4.0	5298.9	69.1	-45.3	82.7
5320.0	0.7	356.0	5318.9	69.4	-45.3	82.9
5340.0	0.7	14.0	5338.9	69.6	-45.3	83.0
5360.0	1.3	5.0	5358.9	69.9	-45.3	83.3
5380.0	1.2	351.0	5378.9	70.4	-45.3	83.7
5400.0	0.9	360.0	5398.9	70.7	-45.3	84.0
5420.0	1.3	358.0	5418.9	71.1	-45.3	84.3
5440.0	1.1	6.0	5438.9	71.5	-45.3	84.7
5460.0	1.2	355.0	5458.9	71.9	-45.3	85.0
5480.0	1.1	3.0	5478.9	72.3	-45.3	85.4
5500.0	1.0	353.0	5498.9	72.7	-45.3	85.7
5520.0	1.1	345.0	5518.9	73.1	-45.4	86.0
5540.0	1.0	328.0	5538.9	73.4	-45.5	86.4
5560.0	1.0	10.0	5558.9	73.7	-45.6	86.7
5580.0	1.1	18.0	5578.9	74.1	-45.5	86.9
5600.0	0.9	10.0	5598.9	74.4	-45.4	87.2
5620.0	1.1	21.0	5618.9	74.7	-45.3	87.4
5640.0	1.1	10.0	5638.9	75.1	-45.2	87.7
5660.0	0.9	1.0	5658.9	75.5	-45.2	87.9
5680.0	1.1	18.0	5678.8	75.8	-45.1	88.2
5700.0	1.1	2.0	5698.8	76.2	-45.1	88.5
5720.0	1.0	5.0	5718.8	76.5	-45.0	88.8
5740.0	1.1	14.0	5738.8	76.9	-45.0	89.1
5760.0	1.1	16.0	5758.8	77.3	-44.9	89.4
5780.0	1.1	8.0	5778.8	77.6	-44.8	89.6
5800.0	0.9	359.0	5798.8	78.0	-44.8	89.9
5820.0	1.1	355.0	5818.8	78.3	-44.8	90.2
5840.0	0.8	354.0	5838.8	78.7	-44.8	90.5
5860.0	3.4	341.0	5858.8	79.4	-45.0	91.2
5880.0	1.2	3.0	5878.8	80.1	-45.2	92.0
5900.0	0.7	27.0	5898.8	80.5	-45.1	92.3
5920.0	0.9	11.0	5918.8	80.7	-45.1	92.4
5940.0	1.1	28.0	5938.8	81.0	-44.9	92.7
5960.0	0.9	358.0	5958.8	81.4	-44.9	92.9
5980.0	0.7	66.0	5978.8	81.6	-44.8	93.0
6000.0	0.7	353.0	5998.8	81.7	-44.7	93.1
6020.0	0.7	33.0	6018.8	82.0	-44.6	93.3
6040.0	0.7	30.0	6038.8	82.2	-44.5	93.4
6060.0	1.5	359.0	6058.8	82.5	-44.4	93.7
6080.0	1.9	323.0	6078.8	83.1	-44.6	94.3
6100.0	2.1	324.0	6098.7	83.6	-45.0	95.0
6120.0	2.0	319.0	6118.7	84.2	-45.5	95.7
6140.0	1.5	332.0	6138.7	84.7	-45.8	96.3
6160.0	1.9	331.0	6158.7	85.2	-46.1	96.9
6180.0	1.0	336.0	6178.7	85.7	-46.3	97.4

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DEPTH FEET	DEVIATION DEGREES	AZIMUTH DEGREES	TRUE VERTICAL DEPTH FEET	CO-ORDINATES + NORTH - SOUTH	+ EAST - WEST	COURSE LENGTH FEET
6200.0	1.5	329.0	6198.7	86.0	-46.6	97.8
6220.0	1.3	321.0	6218.7	86.4	-46.8	98.3
6240.0	1.6	344.0	6238.7	86.9	-47.1	98.8
6260.0	1.5	354.0	6258.7	87.4	-47.2	99.3
6280.0	1.1	341.0	6278.7	87.9	-47.2	99.8
6300.0	0.9	22.0	6298.7	88.2	-47.3	100.0
6320.0	1.1	48.0	6318.7	88.5	-47.0	100.2
6340.0	3.0	45.0	6338.7	89.0	-46.5	100.4
6360.0	1.4	31.0	6358.6	89.5	-46.0	100.7
6380.0	1.5	24.3	6378.6	90.0	-45.8	101.0
6400.0	1.4	35.0	6398.6	90.4	-45.6	101.3
6420.0	1.7	38.0	6418.6	90.9	-45.3	101.5
6440.0	1.9	39.0	6438.6	91.4	-44.9	101.8
6460.0	1.9	47.0	6458.6	91.8	-44.4	102.0
6480.0	2.1	53.0	6478.6	92.3	-43.9	102.2
6500.0	2.2	52.0	6498.6	92.7	-43.3	102.4
6520.0	2.3	56.0	6518.6	93.2	-42.7	102.5
6540.0	2.6	65.0	6538.5	93.6	-41.9	102.6
6560.0	2.8	66.0	6558.5	94.0	-41.1	102.6
6580.0	2.7	69.0	6578.5	94.4	-40.2	102.6
6600.0	2.9	73.0	6598.5	94.7	-39.3	102.5
6620.0	2.9	71.0	6618.5	95.0	-38.3	102.4
6640.0	2.4	72.0	6638.4	95.3	-37.4	102.4
6660.0	2.8	72.0	6658.4	95.6	-36.6	102.3
6680.0	3.0	70.0	6678.4	95.9	-35.6	102.3
6700.0	2.9	65.0	6698.4	96.3	-34.6	102.3
6720.0	3.1	70.0	6718.3	96.7	-33.7	102.4
6740.0	3.1	69.0	6738.3	97.1	-32.7	102.4
6760.0	3.1	75.0	6758.3	97.4	-31.6	102.4
6780.0	2.5	72.0	6778.2	97.7	-30.7	102.4
6800.0	3.1	73.0	6798.2	98.0	-29.8	102.4
6820.0	3.3	71.0	6818.2	98.3	-28.7	102.4
6840.0	3.5	73.0	6838.2	98.7	-27.6	102.5
6860.0	3.7	74.0	6858.1	99.1	-26.4	102.5
6880.0	3.3	74.0	6878.1	99.4	-25.2	102.5
6900.0	3.8	68.0	6898.0	99.8	-24.0	102.7
6920.0	3.3	71.0	6918.0	100.2	-22.9	102.8
6940.0	3.7	70.0	6938.0	100.6	-21.7	103.0
6960.0	3.3	71.0	6957.9	101.0	-20.6	103.1
6980.0	3.5	72.0	6977.9	101.4	-19.5	103.3
7000.0	3.3	72.0	6997.9	101.8	-18.3	103.4
7020.0	3.3	67.0	7017.8	102.2	-17.2	103.6
7040.0	3.2	68.0	7037.8	102.6	-16.2	103.9
7060.0	3.3	65.0	7057.8	103.1	-15.2	104.2
7080.0	3.2	67.0	7077.7	103.5	-14.1	104.5
7100.0	3.1	66.0	7097.7	104.0	-13.1	104.8

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DEPTH FEET	DEVIATION DEGREES	AZIMUTH DEGREES	TRUE VERTICAL DEPTH FEET	CO-ORDINATES + NORTH - SOUTH	+ EAST - WEST	COURSE LENGTH FEET
7120.0	3.1	65.0	7117.7	104.4	-12.1	105.1
7140.0	3.9	72.0	7137.6	104.9	-11.0	105.4
7160.0	3.3	64.0	7157.6	105.3	-9.8	105.8
7180.0	3.9	62.0	7177.6	105.9	-8.7	106.3
7200.0	3.4	68.0	7197.5	106.4	-7.6	106.7
7220.0	3.5	64.0	7217.5	106.9	-6.5	107.1
7240.0	3.7	66.0	7237.4	107.5	-5.3	107.6
7260.0	3.6	72.0	7257.4	107.9	-4.1	108.0
7280.0	3.7	69.0	7277.4	108.3	-2.9	108.4
7300.0	3.7	74.0	7297.3	108.8	-1.7	108.8
7320.0	3.5	68.0	7317.3	109.2	-0.5	109.2
7340.0	3.5	69.0	7337.2	109.6	0.6	109.6
7360.0	3.6	71.0	7357.2	110.0	1.8	110.0
7380.0	3.8	66.0	7377.2	110.5	3.0	110.5
7400.0	3.5	74.0	7397.1	110.9	4.2	111.0
7420.0	3.9	57.0	7417.1	111.5	5.3	111.6
7440.0	4.2	68.0	7437.0	112.1	6.6	112.3
7460.0	4.0	62.0	7457.0	112.7	7.9	113.0
7480.0	3.6	64.0	7476.9	113.3	9.0	113.7
7500.0	3.8	66.0	7496.9	113.9	10.2	114.3
7520.0	3.7	64.0	7516.8	114.4	11.4	115.0
7540.0	3.9	66.0	7536.8	115.0	12.6	115.7
7560.0	3.9	62.0	7556.8	115.6	13.8	116.4
7580.0	3.9	62.0	7576.7	116.2	15.0	117.2
7600.0	3.7	65.0	7596.7	116.8	16.2	117.9
7620.0	3.9	69.0	7616.6	117.3	17.4	118.6
7640.0	3.4	68.0	7636.6	117.8	18.6	119.3
7660.0	3.6	68.0	7656.5	118.3	19.7	119.9
7680.0	3.4	75.0	7676.5	118.6	20.9	120.5
7700.0	3.3	71.0	7696.5	119.0	22.0	121.0
7720.0	3.5	64.0	7716.4	119.4	23.1	121.7
7740.0	3.3	66.0	7736.4	119.9	24.2	122.4
7760.0	3.3	68.0	7756.4	120.4	25.2	123.0
7780.0	3.2	63.0	7776.3	120.9	26.3	123.7
7800.0	3.3	58.0	7796.3	121.4	27.3	124.4
7820.0	3.4	56.0	7816.3	122.1	28.2	125.3
7840.0	3.5	61.0	7836.2	122.7	29.3	126.1
7860.0	3.5	54.0	7856.2	123.3	30.3	127.0
7880.0	3.5	51.0	7876.2	124.1	31.3	128.0
7900.0	3.4	57.0	7896.1	124.8	32.2	128.9
7920.0	3.5	52.0	7916.1	125.5	33.2	129.8
7940.0	3.6	56.0	7936.1	126.2	34.2	130.8
7960.0	3.9	52.0	7956.0	127.0	35.3	131.8
7980.0	3.5	54.0	7976.0	127.8	36.3	132.8
8000.0	3.5	49.0	7995.9	128.5	37.3	133.8
8020.0	3.7	53.0	8015.9	129.3	38.2	134.8

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DEPTH FEET	DEVIATION DEGREES	AZIMUTH DEGREES	TRUE VERTICAL DEPTH FEET	CO-ORDINATES + NORTH - SOUTH	+ EAST - WEST	COURSE LENGTH FEET
8040.0	3.7	48.0	8035.8	130.1	39.2	135.9
8060.0	3.7	49.0	8055.8	131.0	40.2	137.0
8080.0	3.7	53.0	8075.8	131.8	41.2	138.1
8100.0	3.8	54.0	8095.7	132.6	42.2	139.1
8120.0	3.7	53.0	8115.7	133.4	43.3	140.2
8140.0	3.7	57.0	8135.6	134.1	44.4	141.2
8160.0	3.8	57.0	8155.6	134.8	45.5	142.3
8180.0	3.7	56.0	8175.6	135.5	46.5	143.3
8200.0	3.9	56.0	8195.5	136.3	47.6	144.4
8220.0	3.9	56.0	8215.5	137.0	48.8	145.4
8240.0	3.9	54.0	8235.4	137.8	49.9	146.6
8260.0	4.0	54.0	8255.4	138.6	51.0	147.7
8280.0	4.1	48.0	8275.3	139.5	52.1	148.9
8300.0	4.2	46.0	8295.3	140.5	53.2	150.2
8320.0	4.4	42.0	8315.2	141.6	54.2	151.6
8340.0	4.4	34.0	8335.2	142.8	55.1	153.1
8360.0	4.3	36.0	8355.1	144.0	56.0	154.5
8380.0	4.3	32.0	8375.0	145.3	56.8	156.0
8400.0	4.6	33.0	8395.0	146.6	57.7	157.5
8420.0	4.5	32.0	8414.9	147.9	58.5	159.1
8440.0	4.4	28.0	8434.9	149.3	59.3	160.6
8460.0	4.5	32.0	8454.8	150.6	60.1	162.1
8480.0	4.7	28.0	8474.7	152.0	60.9	163.7
8500.0	4.7	33.0	8494.7	153.4	61.7	165.3
8520.0	4.5	24.0	8514.6	154.8	62.5	166.9
8540.0	4.7	21.0	8534.5	156.3	63.1	168.5
8560.0	4.7	28.0	8554.5	157.8	63.8	170.2
8580.0	4.6	22.0	8574.4	159.2	64.5	171.8
8600.0	4.7	26.0	8594.3	160.7	65.1	173.4
8620.0	4.9	21.0	8614.3	162.3	65.8	175.1
8640.0	4.7	17.0	8634.2	163.8	66.3	176.7
8660.0	5.2	13.0	8654.1	165.5	66.8	178.5
8680.0	4.7	16.0	8674.0	167.2	67.2	180.2
8700.0	4.9	11.0	8694.0	168.8	67.6	181.8
8720.0	4.7	13.0	8713.9	170.4	67.9	183.5
8740.0	4.9	21.0	8733.8	172.0	68.4	185.1
8760.0	5.1	14.0	8753.8	173.7	68.9	186.9
8780.0	5.3	15.0	8773.7	175.4	69.4	188.7
8800.0	3.2	11.0	8793.6	176.9	69.7	190.1
8820.0	4.4	16.0	8813.6	178.2	70.1	191.4
8840.0	3.9	26.0	8833.5	179.5	70.6	192.9
8860.0	3.8	17.0	8853.5	180.8	71.1	194.2
8880.0	3.8	18.0	8873.4	182.0	71.5	195.6
8900.0	3.1	20.0	8893.4	183.2	71.9	196.8
8920.0	4.2	18.0	8913.4	184.4	72.3	198.0
8940.0	3.5	13.0	8933.3	185.7	72.6	199.4

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DEPTH FEET	DEVIATION DEGREES	AZIMUTH DEGREES	TRUE VERTICAL DEPTH FEET	CO-ORDINATES + NORTH - SOUTH	+ EAST - WEST	COURSE LENGTH FEET
8960.0	4.6	24.0	8953.3	187.0	73.1	200.8
8980.0	3.0	24.0	8973.2	188.2	73.6	202.1
9000.0	4.4	20.0	8993.2	189.4	74.1	203.4
9020.0	3.5	16.0	9013.1	190.7	74.5	204.8
9040.0	3.7	16.0	9033.1	191.9	74.9	206.0
9060.0	2.6	16.0	9053.1	193.0	75.2	207.1
9080.0	4.6	18.0	9073.0	194.2	75.6	208.4
9100.0	3.4	13.0	9093.0	195.5	75.9	209.7
9120.0	3.3	14.0	9112.9	196.6	76.2	210.9
9140.0	3.5	16.0	9132.9	197.8	76.5	212.1
9160.0	3.5	18.0	9152.9	199.0	76.9	213.3
9180.0	3.4	15.0	9172.8	200.1	77.2	214.5
9200.0	3.4	21.0	9192.8	201.2	77.6	215.7
9220.0	3.5	18.0	9212.8	202.4	78.0	216.9
9240.0	3.3	19.0	9232.7	203.5	78.4	218.1
9260.0	3.4	19.0	9252.7	204.6	78.7	219.2
9280.0	3.5	18.0	9272.6	205.7	79.1	220.4
9300.0	3.2	14.0	9292.6	206.9	79.5	221.6
9320.0	3.1	22.0	9312.6	207.9	79.8	222.7
9340.0	3.2	21.0	9332.6	208.9	80.2	223.8
9360.0	2.9	21.0	9352.5	209.9	80.6	224.9
9380.0	3.2	19.8	9372.5	210.9	80.9	225.9
9400.0	3.1	16.3	9392.5	212.0	81.3	227.0
9420.0	3.1	22.0	9412.4	213.0	81.6	228.1
9440.0	3.0	21.0	9432.4	214.0	82.0	229.2
9460.0	3.0	22.0	9452.4	215.0	82.4	230.2
9480.0	3.0	23.0	9472.4	215.9	82.8	231.3
9500.0	3.0	23.0	9492.3	216.9	83.2	232.3
9520.0	3.0	24.0	9512.3	217.9	83.6	233.4
9540.0	3.0	23.0	9532.3	218.8	84.1	234.4
9560.0	3.0	24.0	9552.2	219.8	84.5	235.5
9580.0	2.9	24.3	9572.2	220.7	84.9	236.5
9600.0	3.0	28.9	9592.2	221.6	85.4	237.5
9620.0	3.0	26.1	9612.2	222.6	85.8	238.5
9640.0	3.0	28.3	9632.1	223.5	86.3	239.6
9660.0	2.9	34.0	9652.1	224.4	86.8	240.6
9680.0	2.9	33.0	9672.1	225.2	87.4	241.6
9700.0	2.8	33.8	9692.1	226.0	88.0	242.6
9720.0	2.8	29.3	9712.0	226.9	88.5	243.5
9740.0	2.8	34.0	9732.0	227.7	89.0	244.5
9760.0	2.7	33.0	9752.0	228.5	89.5	245.4
9780.0	2.7	33.0	9772.0	229.3	90.0	246.3
9800.0	2.7	34.1	9791.9	230.1	90.5	247.3
9820.0	2.8	35.9	9811.9	230.9	91.1	248.2
9840.0	2.7	34.0	9831.9	231.7	91.6	249.1
9860.0	2.8	33.0	9851.9	232.5	92.2	250.1

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DEPTH FEET	DEVIATION DEGREES	AZIMUTH DEGREES	TRUE VERTICAL DEPTH FEET	CO-ORDINATES + NORTH - SOUTH	+ EAST - WEST	COURSE LENGTH FEET
9880.0	2.9	33.0	9871.9	233.3	92.7	251.0
9900.0	2.7	34.2	9891.8	234.1	93.2	252.0
9920.0	2.7	37.9	9911.8	234.9	93.8	252.9
9940.0	2.9	36.3	9931.8	235.6	94.4	253.8
9960.0	2.8	41.8	9951.8	236.4	95.0	254.8
9980.0	2.8	38.0	9971.7	237.2	95.6	255.7
10000.0	2.8	38.7	9991.7	237.9	96.2	256.7
10020.0	2.6	32.0	10011.7	238.7	96.8	257.6
10040.0	2.9	33.3	10031.7	239.5	97.3	258.5
10060.0	2.7	37.8	10051.6	240.3	97.9	259.5
10080.0	2.7	33.8	10071.6	241.1	98.4	260.4
10100.0	2.5	30.0	10091.6	241.8	98.9	261.3
10120.0	2.3	31.1	10111.6	242.6	99.3	262.1
10140.0	2.7	32.9	10131.6	243.3	99.8	263.0
10160.0	2.6	31.1	10151.5	244.1	100.3	263.9
10180.0	2.7	33.0	10171.5	244.9	100.8	264.8
10200.0	2.7	33.2	10191.5	245.6	101.3	265.7
10220.0	2.8	35.8	10211.5	246.4	101.8	266.7
10240.0	2.7	32.2	10231.4	247.2	102.4	267.6
10260.0	2.6	34.8	10251.4	248.0	102.9	268.5
10280.0	2.6	31.9	10271.4	248.8	103.4	269.4
10300.0	2.5	29.0	10291.4	249.5	103.8	270.3
10320.0	2.5	29.9	10311.4	250.3	104.3	271.1
10340.0	2.5	28.1	10331.4	251.0	104.7	272.0
10360.0	2.5	31.1	10351.3	251.8	105.1	272.9
10380.0	2.5	34.0	10371.3	252.5	105.6	273.7
10400.0	2.5	35.0	10391.3	253.3	106.1	274.6
10420.0	2.6	36.0	10411.3	254.0	106.6	275.4
10440.0	2.6	37.0	10431.3	254.7	107.1	276.3
10460.0	2.6	35.9	10451.2	255.4	107.7	277.2
10480.0	2.5	34.2	10471.2	256.2	108.2	278.1
10500.0	2.4	37.1	10491.2	256.9	108.7	278.9
10520.0	2.3	39.1	10511.2	257.5	109.2	279.7
10540.0	2.2	41.0	10531.2	258.1	109.7	280.5
10560.0	2.2	41.1	10551.1	258.7	110.2	281.2
10580.0	2.3	42.8	10571.1	259.3	110.7	281.9
10600.0	2.2	38.0	10591.1	259.9	111.2	282.7
10620.0	2.2	39.3	10611.1	260.5	111.7	283.4
10640.0	2.2	45.0	10631.1	261.0	112.2	284.1
10660.0	2.3	46.2	10651.1	261.6	112.8	284.9
10680.0	2.2	49.0	10671.1	262.1	113.4	285.6
10700.0	2.3	49.1	10691.0	262.6	114.0	286.3
10720.0	2.2	51.2	10711.0	263.1	114.6	287.0
10740.0	2.2	54.8	10731.0	263.6	115.2	287.7
10760.0	2.1	49.7	10751.0	264.1	115.8	288.3
10780.0	2.1	43.3	10771.0	264.6	116.3	289.0

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DEPTH FEET	DEVIATION DEGREES	AZIMUTH DEGREES	TRUE VERTICAL DEPTH FEET	CO-ORDINATES + NORTH - SOUTH	+ EAST - WEST	COURSE LENGTH FEET
10800.0	2.1	50.2	10791.0	265.1	116.8	289.7
10820.0	2.1	52.9	10811.0	265.5	117.4	290.3
10840.0	2.1	51.3	10830.9	266.0	118.0	291.0
10860.0	2.1	56.0	10850.9	266.4	118.6	291.6
10880.0	2.1	54.8	10870.9	266.8	119.2	292.2
10900.0	2.0	52.1	10890.9	267.2	119.7	292.8
10920.0	1.8	54.0	10910.9	267.6	120.3	293.4
10940.0	1.8	53.1	10930.9	268.0	120.8	294.0
10960.0	1.9	55.0	10950.9	268.4	121.3	294.5
10980.0	1.9	56.1	10970.9	268.8	121.8	295.1
11000.0	2.0	58.0	10990.8	269.1	122.4	295.7
11020.0	1.9	58.8	11010.8	269.5	123.0	296.2
11040.0	1.8	56.2	11030.8	269.8	123.5	296.8
11060.0	1.7	59.1	11050.8	270.2	124.1	297.3
11080.0	1.7	60.8	11070.8	270.5	124.6	297.8
11100.0	1.6	56.6	11090.8	270.8	125.1	298.2
11120.0	1.5	49.4	11110.8	271.1	125.5	298.7
11140.0	1.7	56.9	11130.8	271.4	125.9	299.2
11160.0	1.6	54.9	11150.8	271.7	126.4	299.7
11180.0	1.5	53.0	11170.8	272.1	126.9	300.2
11200.0	1.6	51.8	11190.8	272.4	127.3	300.7
11220.0	1.6	49.0	11210.8	272.7	127.7	301.2
11240.0	1.5	48.2	11230.8	273.1	128.1	301.7
11260.0	1.5	50.5	11250.7	273.4	128.5	302.1
11280.0	1.3	39.9	11270.7	273.8	128.9	302.6
11300.0	1.9	37.0	11290.7	274.2	129.2	303.1
11320.0	1.4	19.0	11310.7	274.7	129.5	303.7
11340.0	1.4	19.0	11330.7	275.2	129.6	304.2
11360.0	1.5	21.0	11350.7	275.7	129.8	304.7
11380.0	1.6	19.0	11370.7	276.2	130.0	305.2
11400.0	1.7	15.0	11390.7	276.7	130.2	305.8
11420.0	1.7	12.0	11410.7	277.3	130.3	306.4
11440.0	1.9	3.0	11430.7	277.9	130.4	307.0
11460.0	2.2	1.0	11450.7	278.6	130.4	307.6
11480.0	2.4	356.0	11470.6	279.4	130.4	308.3
11500.0	2.7	352.0	11490.6	280.3	130.3	309.1
11520.0	3.0	348.0	11510.6	281.3	130.1	309.9
11540.0	3.2	344.0	11530.6	282.3	129.9	310.8
11560.0	3.6	346.0	11550.5	283.5	129.5	311.7
11580.0	3.9	344.0	11570.5	284.7	129.2	312.7
11600.0	4.2	342.0	11590.4	286.1	128.8	313.7
11620.0	4.5	338.0	11610.4	287.5	128.3	314.8
11640.0	4.7	337.0	11630.3	289.0	127.7	315.9
11660.0	4.9	335.0	11650.3	290.5	127.0	317.1
11680.0	5.2	331.0	11670.2	292.1	126.2	318.2
11700.0	5.3	329.0	11690.1	293.7	125.3	319.3

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DEPTH FEET	DEVIATION DEGREES	AZIMUTH DEGREES	TRUE VERTICAL DEPTH FEET	CO-ORDINATES + NORTH - SOUTH	+ EAST - WEST	COURSE LENGTH FEET
11720.0	5.5	327.0	11710.0	295.3	124.3	320.4
11740.0	5.8	326.0	11729.9	296.9	123.2	321.5
11760.0	6.0	322.0	11749.8	298.6	122.0	322.5
11780.0	6.2	323.0	11769.7	300.3	120.7	323.6
11800.0	6.3	322.0	11789.6	302.0	119.4	324.7
11820.0	6.6	321.0	11809.4	303.7	118.0	325.8
11840.0	6.8	320.0	11829.3	305.6	116.5	327.0
11860.0	7.0	317.0	11849.2	307.3	114.9	328.1
11880.0	7.1	320.0	11869.0	309.2	113.3	329.3
11900.0	7.1	320.0	11888.9	311.1	111.7	330.5
11920.0	7.2	321.0	11908.7	313.0	110.1	331.8
11940.0	7.2	317.0	11928.5	314.9	108.4	333.0
11960.0	7.5	318.0	11948.4	316.8	106.7	334.3
11980.0	7.6	317.7	11968.2	318.7	104.9	335.6
12000.0	7.7	319.0	11988.0	320.7	103.1	336.9
12020.0	7.8	321.0	12007.8	322.8	101.4	338.3
12040.0	8.3	320.0	12027.6	324.9	99.6	339.9
12060.0	8.4	318.0	12047.4	327.1	97.7	341.4
12080.0	8.5	320.0	12067.2	329.4	95.8	343.0
12100.0	8.5	319.0	12087.0	331.6	93.9	344.6
12120.0	8.6	320.0	12106.8	333.9	92.0	346.3
12140.0	8.6	319.0	12126.6	336.1	90.0	348.0
12160.0	8.6	320.0	12146.3	338.4	88.1	349.7
12180.0	8.5	321.0	12166.1	340.7	86.2	351.4
12200.0	8.7	318.0	12185.9	343.0	84.2	353.2
12220.0	8.4	324.0	12205.7	345.3	82.4	355.0
12240.0	9.0	323.0	12225.4	347.7	80.6	356.9
12260.0	8.8	320.0	12245.2	350.1	78.6	358.9
12280.0	8.7	323.0	12265.0	352.5	76.7	360.8
12300.0	8.7	325.0	12284.7	355.0	75.0	362.8
12320.0	8.7	328.0	12304.5	357.5	73.3	364.9
12340.0	8.7	319.0	12324.3	359.9	71.5	366.9
12360.0	8.9	325.0	12344.0	362.3	69.6	368.9
12380.0	9.4	326.0	12363.8	364.9	67.8	371.2
12400.0	9.3	323.0	12383.5	367.6	65.9	373.4
12420.0	9.4	327.0	12403.2	370.2	64.1	375.7
12440.0	9.3	324.0	12423.0	372.9	62.2	378.1
12460.0	9.4	323.0	12442.7	375.5	60.3	380.3
12480.0	9.6	325.0	12462.4	378.2	58.4	382.7
12500.0	9.7	324.0	12482.2	380.9	56.4	385.1
12520.0	9.9	321.0	12501.9	383.6	54.3	387.5
12540.0	9.8	323.0	12521.6	386.3	52.2	389.8
12560.0	9.8	319.0	12541.3	389.0	50.1	392.2
12580.0	9.8	321.0	12561.0	391.6	47.9	394.5
12600.0	10.2	322.0	12580.7	394.3	45.7	396.9
12620.0	9.7	316.0	12600.4	396.9	43.5	399.3

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DEPTH FEET	DEVIATION DEGREES	AZIMUTH DEGREES	TRUE VERTICAL DEPTH FEET	CO-ORDINATES + NORTH - SOUTH	+ EAST - WEST	COURSE LENGTH FEET
12640.0	9.9	323.0	12620.1	399.5	41.3	401.6
12660.0	9.9	323.0	12639.8	402.2	39.2	404.1
12680.0	10.0	324.0	12659.5	405.0	37.2	406.7
12700.0	10.0	325.0	12679.2	407.8	35.1	409.4
12720.0	10.1	322.0	12698.9	410.6	33.1	412.0
12740.0	10.0	325.0	12718.6	413.4	31.0	414.6
12760.0	9.9	322.0	12738.3	416.2	28.9	417.2
12780.0	10.0	322.0	12758.0	418.9	26.8	419.8
12800.0	9.9	325.0	12777.7	421.7	24.7	422.5
12820.0	9.8	323.0	12797.4	424.5	22.7	425.1
12840.0	9.8	323.0	12817.1	427.2	20.7	427.7
12860.0	10.0	322.0	12836.8	429.9	18.6	430.3
12880.0	10.0	321.0	12856.5	432.7	16.4	433.0
12900.0	10.0	320.0	12876.2	435.3	14.2	435.6
12920.0	10.0	318.0	12895.9	438.0	11.9	438.1
12940.0	10.1	318.0	12915.6	440.6	9.6	440.7
12960.0	10.2	320.0	12935.3	443.2	7.3	443.3
12980.0	10.2	316.0	12954.9	445.8	4.9	445.9
13000.0	10.2	317.0	12974.6	448.4	2.5	448.4
13020.0	10.2	314.0	12994.3	450.9	0.0	450.9
13040.0	10.3	316.0	13014.0	453.5	-2.5	453.5
13060.0	10.3	313.0	13033.7	456.0	-5.1	456.0
13080.0	10.5	317.0	13053.3	458.5	-7.6	458.6
13100.0	10.7	315.0	13073.0	461.2	-10.2	461.3
13120.0	10.8	315.0	13092.6	463.8	-12.8	464.0
13140.0	11.0	314.0	13112.3	466.4	-15.5	466.7
13160.0	11.0	315.0	13131.9	469.1	-18.2	469.5
13180.0	11.0	317.0	13151.5	471.9	-20.9	472.3
13200.0	11.1	316.0	13171.2	474.6	-23.5	475.2
13220.0	11.3	317.0	13190.8	477.5	-26.2	478.2
13240.0	11.4	317.0	13210.4	480.3	-28.9	481.2
13260.0	11.3	317.0	13230.0	483.2	-31.5	484.2
13280.0	11.4	317.0	13249.6	486.1	-34.2	487.3
13300.0	11.5	315.0	13269.2	489.0	-37.0	490.4
13320.0	11.3	313.0	13288.8	491.7	-39.8	493.3
13340.0	11.4	317.0	13308.4	494.5	-42.6	496.3
13360.0	11.4	313.0	13328.0	497.3	-45.4	499.3
13380.0	11.5	313.0	13347.6	500.0	-48.3	502.3
13400.0	11.7	314.0	13367.2	502.8	-51.2	505.4
13420.0	11.8	313.0	13386.8	505.6	-54.2	508.4
13440.0	11.8	310.0	13406.4	508.3	-57.2	511.5
13460.0	11.8	311.0	13426.0	510.9	-60.4	514.5
13480.0	11.9	311.0	13445.5	513.6	-63.5	517.5
13500.0	11.8	313.0	13465.1	516.4	-66.5	520.6
13520.0	11.8	312.0	13484.7	519.1	-69.5	523.8
13540.0	11.8	310.0	13504.3	521.8	-72.6	526.8

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DEPTH FEET	DEVIATION DEGREES	AZIMUTH DEGREES	TRUE VERTICAL DEPTH FEET	CO-ORDINATES + NORTH - SOUTH	CO-ORDINATES + EAST - WEST	COURSE LENGTH FEET
13560.0	11.9	309.0	13523.9	524.4	-75.8	529.9
13580.0	12.0	312.0	13543.4	527.1	-78.9	533.0
13600.0	12.0	312.0	13563.0	529.9	-82.0	536.2
13620.0	12.0	311.0	13582.5	532.6	-85.1	539.4
13640.0	11.9	315.0	13602.1	535.5	-88.2	542.7
13660.0	12.2	313.0	13621.7	538.4	-91.2	546.0
13680.0	12.2	310.0	13641.2	541.2	-94.3	549.3
13700.0	12.2	309.0	13660.8	543.9	-97.6	552.5
13720.0	12.2	310.0	13680.3	546.5	-100.8	555.8
13740.0	12.2	307.0	13699.9	549.2	-104.2	559.0
13760.0	12.2	311.0	13719.4	551.8	-107.4	562.2
13780.0	12.3	306.0	13739.0	554.5	-110.8	565.4
13800.0	12.4	306.0	13758.5	557.0	-114.2	568.6
13820.0	12.4	310.0	13778.0	559.6	-117.6	571.8
13840.0	12.4	311.0	13797.6	562.4	-120.9	575.3
13860.0	12.3	311.0	13817.1	565.2	-124.1	578.7
13880.0	12.3	311.0	13836.6	568.0	-127.3	582.1
13900.0	12.1	308.0	13856.2	570.7	-130.6	585.5
13920.0	12.0	308.0	13875.7	573.3	-133.9	588.7
13940.0	11.9	307.0	13895.3	575.8	-137.1	591.9
13960.0	11.9	309.0	13914.9	578.3	-140.4	595.1
13972.0	11.8	303.0	13926.6	579.8	-142.4	597.0

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*                         BOTTOM HOLE LOCATION                              *
*                                                                           *
*                         COURSE LENGTH:          597.0  FEET               *
*                                                                           *
*                         COURSE AZIMUTH:         346.2  DEGREES            *
*                                                                           *
*                                                                           *
*                         MEASURED DEPTH:       13972.0  FEET               *
*                                                                           *
*                         TRUE VERTICAL DEPTH: 13926.6  FEET                *
*                                                                           *
*                         DISTANCE NORTH:         579.8  FEET               *
*                                                                           *
*                         DISTANCE WEST:          142.4  FEET               *
*                                                                           *
*                                                                           *
*                         EXACT RADIUS OF CURVATURE METHOD                  *
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