GL02477
input 8-2-79 Mason

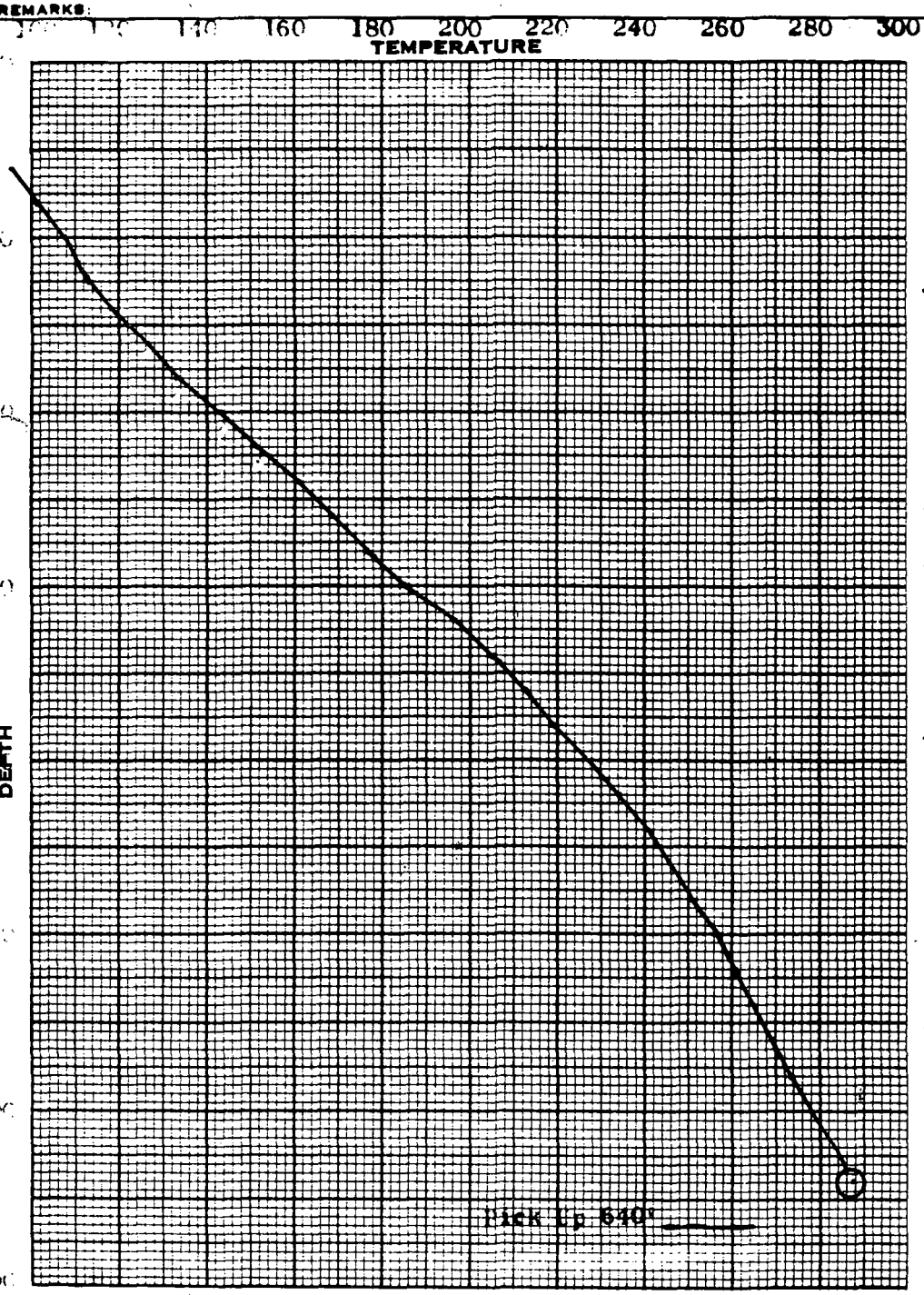
Production Specialists

AGNEW AND SWE' T
3914 GILMORE AVENUE
BAKERSFIELD, CALIFORNIA
93308

24 HOUR PHONE 327-2267
AREA CODE 805

SUBSURFACE TEMPERATURE SURVEY

OWNER CHEVRON OIL COMPANY — FIELD Soda Lake — WELL NAME 1-29
CASING — ELEV. — DATE May 30, 1975
LINER DESCRIPTION: — ZERO POINT 12'
DEPTH 990' - plug
ZONE
TUBING DETAIL: 2-3/8" @ 945'
INSTRUMENT 90 - 660 °FAHR
SERIAL NO. 10008
PUMP SHOE — GAS ANCHOR — INTAKE:
PURPOSE Static Temperature Survey - Traverse 20'/min. — MAX. TEMP. 287.0 °F @ 640'
REMARKS:



STABLIZATION PERIOD
GROSS OIL RATE B D
NET OIL RATE B D
FORMATION GAS MCF D
GOR CFT BBL
CIRCULATED GAS MCF/D
OIL DRY GRAVITY °API

PRESSURES.	OBS	COR
CASING. PSIG	0	0
TUBING. PSIG	0	0

DEPTH	TEMP.	DEPTH	TEMP.
0		340	205.?
20		360	212.3
40		380	218.8
60	97.4	400	227.5
80	101.8	420	234.0
100	107.1	440	240.2
120	112.0	460	245.5
140	118.5	480	250.8
160	126.0	500	256.7
180	132.5	520	260.7
200	143.9	540	265.0
220	151.4	560	269.1
240	160.6	580	273.7
260	168.6	600	278.0
280	176.1	620	283.1
300	184.7	640	287.0
320	196.2		

Time on bottom 7:03 pm
Time off bottom 7:04 pm

BY: Pruett & Morson

SODA LAKE, NV
SODA LAKE #1-29

3 1. Drilling and Completion History Completion Report - New Well Pro-318

3 2. Flow Test Data, 5-20-75 through 5-25-75 including, Report of Analysis, 6-18-75 (Geolabs), Production Record, and Report of Analysis, 6-11-75 (Skyline Labs) Soda Lake 1-29 - Summary of Production Test

3 3. Static Temperature Survey, 5-30-75. 1"=100' Subsurface Temp. Survey

3 4. Maximum Reading Thermometer Data Temperature Build Up Data

2 * 5. Borehole Compensated Sonic Log, 12-28-74 - with Caliper 1013' — 4314

2 * 6. Dual Induction Laterolog w/Linear Correlation Log, 12-28-74 1013 - 4309

2 * 7. Continuous Dipmeter, 12-28-74 1013 - 4305

5.3 - 1025

2 * 8. Induction Electric Log, 12-13-74, Run 1

2 * 9. Compensated Neutron - Formation Density, 12-28-74 - with Gamma Ray 180 - 4305

2 *10. Agnew & Sweet Subsurface Temperature Survey, 1-10-75

2 *11. Agnew & Sweet Subsurface Temperature Survey, 1-27-75

2 *12. Agnew & Sweet Subsurface Temperature Survey, 2-27-75

2 *13. Agnew & Sweet Subsurface Temperature Survey, 4-29-75

2 *14. Mud Log, 2"=100' (Exploration Logging), with core description

2 *15. Mud Log, 2"-1000' (Exploration Logging)

* Indicates that 4th copy is reproducible

TEMPERATURE BUILD UP DATA

DRILLED DEPTH 4274'; DRILL RATE (FT./HR.) 14'/hr (LAST 80' DRILLED).

TIME REACHED DRILLED DEPTH 10:23; TIME SINCE LAST CIRCULATION 12:05 PM.

TYPE TEMP. SURVEY: Inside Drill pipe; MUD TEMP. ~~[illegible]~~ 135°F IN 156°F OUT; DATE: 12/26/74.

Cumulative time since Last circulation		40	89	136	195	316	360	408	455	499	550		
TEMPERATURE RUN		1	2	3	4	5	6	7	8	9	10	11	12
TIME TEMP. TOOL REACHED BOTTOM		1225	1:14	2:01	3:00	5:00	5:45	6:30	7:17	8:03	8:51		
TIME TEMP. TOOL ON BOTTOM		~~20~~	20	20	20	21	20	23	23	21	24		
TIME PULL OFF BOTTOM		12:45	1:34	2:21	3:20	5:21	6:05	6:53	7:40	8:24	9:15		
TEMP. READINGS:													
THERMOMETER # 774		164	171	180	191	211	215	221	226	233	238		
THERMOMETER # 777		164	171	180	191	212	216	224	227	234	238		
THERMOMETER # 784		162	171	181	191	212	216	222	228	234	238		
DEPTH OF THERMOMETERS 4220'													

REMARKS: Reached 4220' at 4 AM.

2 4
1 2
5
4 1

TEMPERATURE BUILD UP DATA

DRILLED DEPTH 2994 ; DRILL RATE (FT./HR.) 70'/hr (LAST 80' DRILLED).

TIME REACHED DRILLED DEPTH 8:40 AM ; TIME ~~SINCE~~ OF LAST CIRCULATION 11:07.

TYPE TEMP. SURVEY: Inside drill pipe ; MUD TEMP. 144°F IN 157°F OUT; DATE: 12/21/74.

	TEMPERATURE RUN											
Cumulative time since circulation	38	80	118	159	201	241	282 X	320 **				
	1	2	3	4	5	6	7	8	9	10	11	12
TIME TEMP. TOOL REACHED BOTTOM	11:24	12:07	12:45	13:26	14:08	14:48	15:27	16:07	16:47			
TIME TEMP. TOOL ON BOTTOM	21	20	~~20~~ 20	20	20	20	22	20				
Time Pull off BOTTOM	11:45	12:27	13:05	13:46	14:28	15:08	15:49	16:27				
TEMP. READINGS: °F												
THERMOMETER # 774	166	173	191	187	196	203	209	216				
THERMOMETER # 777	167	174	180	189	197	203	210	216				
THERMOMETER # 784	167	174	181	189	197	203	210	216				
DEPTH OF THERMOMETERS 2974'												

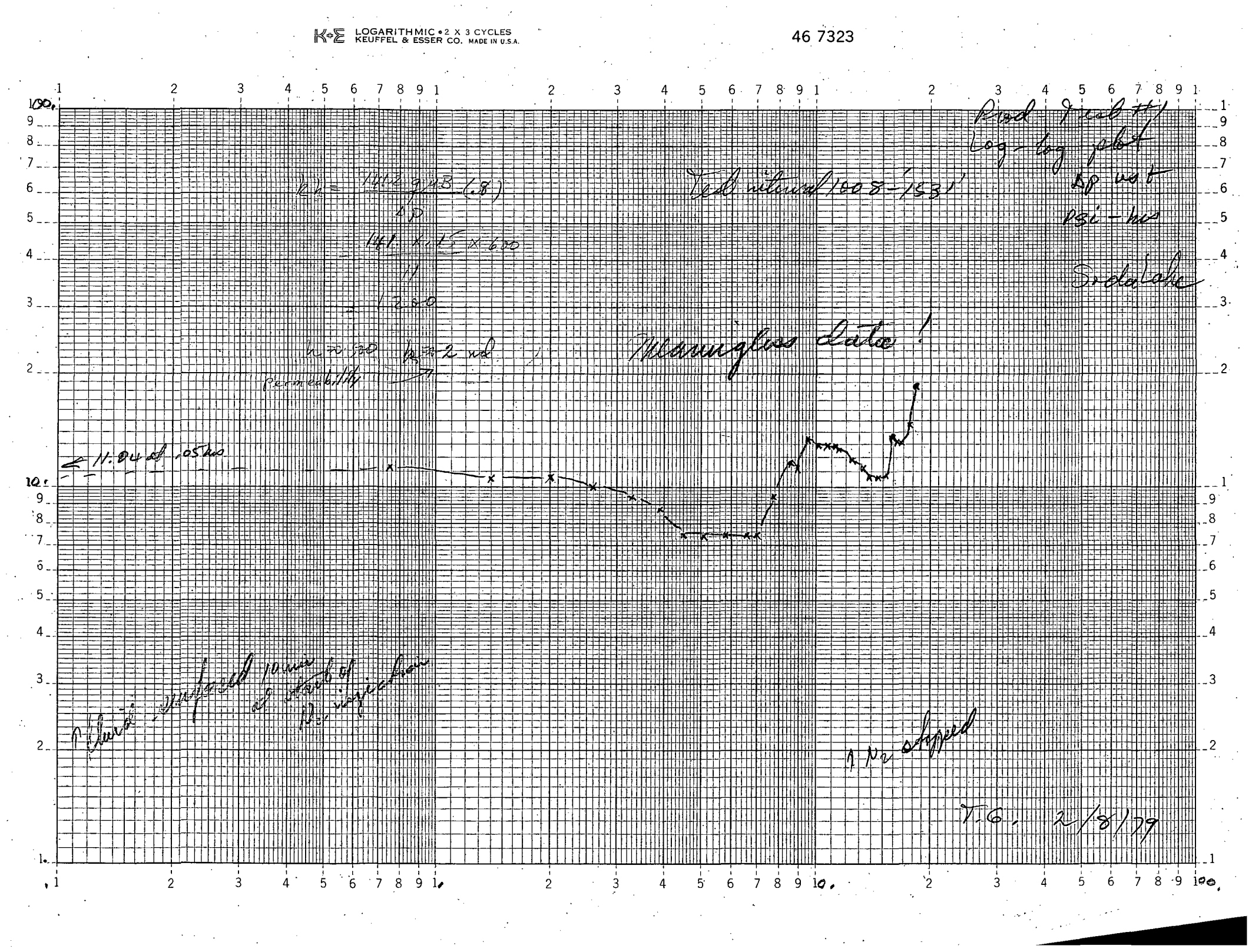
REMARKS: Pipe worked ≈ 3' both when sub pulled off Bottom and also after thermometers have surfaced.

* After Run #7 - pipe worked twice — ≈ 20'

** Wire broke when pull out of hole

805 AM Drilled passed 2974'

46 7323



Soda Lake 1-29
Summary of Production Test 5-20-75 thru 5-25-75

Well File
Nevada
Soda Lake
1-29

5/20/75 Moved in unit and rigged up. Filled hole with approximately 2-3 bbl.

5/21/75 Pulled 2-3/8" tubing to 1700' and attempted to circulate. Hole remained full but returns could not be attained.

7/3/75

Pulled to 1160' and circulated out ± 20 bbl. of thick mud, then ± 40 bbl. blackish water with temp. of 118°F and salinity of 7500 ppm. At this time circulation was lost and hole would not stand full. Spotted 40 bbl. thick gel pill @ 1160 and pulled tubing.

Ran 11" bit to 1008 - unable to fill hole with 50 bbl. gel mud. Ran bit to 1700' and pulled out of hole.

Ran open end tubing to 1694' and equalized 95 sx Class "G" cement treated with .2#/Sk HR-7. No circulation; C.I.P. 10:30 PM.

5/22/75 Located top of cement at 1531 and spotted 30 bbl. fresh water.

Ran Halliburton RTTS packer and set at 958'. Filled annulus with mud.

Conducted 18¼ hour test. See attached report Test #1.

5/23/75 Pulled tester, pumped in 50 bbl. mud and 50 bbl. water to cool hole.

Attempted to run Welex sidewall sample gun which stopped at 1067'. Could not work sampler below 1067.

Ran 13-3/8" Baker Model "N" cast iron bridge plug on wire line and set at 991'.

Using Welex Super Dynajet DP charges, perforated 2½" holes per foot 791 to 980' (189').

5/24/75 Ran Halliburton RTTS packer and set at 744'. Filled annulus with water.

Conducted 13½ hour test. See attached report Test #2.

5/25/75 Landed 2-3/8" open end tubing at 945'. Release rig.

B. D. GARRETT

BDG

Copy sent to Paul English (Phillips) 7/3/75
B

Soda Lake 1-29
Test #1 5/22/75

T.D. 4306 Plug 1531
Csg. 13-3/8 @ 1008

Test interval 1008-1531 (523')
Packer set at 958'
Pressure recorders @ 973'
Max. reading thermometers @ 973'
Rat hole volume (below packer) 83 bbl.

With the packer set at 958, Nowsco 1" tubing was run to 800'. Nitrogen lift started at 4:45 PM (5/22/75) at 100 cfm and fluid surfaced at 4:55 (10 min.)

The well was produced for 756 minutes (12 hours-36 minutes) and shut in for 336 minutes (5 hours-36 minutes).

Production was gaged in a 350± bbl. tank at 15-30 minute intervals. Wave action in the tank made individual gages very erratic. Gages ranged from 220 B/D to 1250 B/D with an overall average of 577 bbls. A total of 300 bbls. was brought to the surface including 83 bbl. of rat hole fluid.

The well was allowed to flow without nitrogen lift on two occasions while pressure samples were taken. The flowing rate was ± 220 B/D but with the down hole cooling that was taking place the well would have died in a very few minutes.

The four maximum reading thermometers gave erratic data as follows:

Range	Reading	
100-500°F	365°F – 185°C	
200-400	325 162°C	174° ave.
60-300	over range	
100-500	351 177°C	

Since prior temperature surveys indicate a temperature of 320± °F this data appears incorrect.

One of the two pressure recorders stopped about the middle of the test; the other functioned properly and the readings are attached.

The pressures indicated by the recorder do not reflect differences of flow rate or shut in - in fact, the shut in pressure is less than the flowing pressure. It appears that the pressure changes were too small for the recorder to resolve.

B. D. GARRETT

Soda Lake 1-29
Test #2 5/24/75

T.D. 4306 Plugs 1531 and 991
Csg. 13-3/8 @ 1008
Perforations: 2/ft. 791-980 (189')

Test interval 791-980
Packer set at 744
Pressure recorders at 760'
Max. reading thermometers at 760'
Rat hole volume (below packer) 37 bbl.

With the packer set at 744', Nowsco 1" tubing was run to 700'. Nitrogen lift was started at 3:53 AM (5/24/75) at 100 cfm and fluid surfaced at 3:57 (4 minutes).

The well was produced for 457 minutes (7 hours-37 minutes) and shut in for 345 minutes (5 hours-45 minutes).

Production was gaged as in Test #1 at rates ranging from 586 to 1380 B/D. A total of 307 bbl. was brought to the surface, including 37 bbl. of rat hole fluid. (See attached detail). The well would not flow without nitrogen lift.

The four maximum reading thermometers were read as follows: 312, 315, 320, 322°F. 156 157 160° 161°C ave-158.5°C ave. 317F

Neither of the two pressure recorders functioned - I believe this was due to operator error when the recorders were installed.

B. D. GARRETT

Soda Lake 1-29 Prod Test #1 5/22/75

	Real Time	Elapsed Time Min	Hrs	Nowsco Tool Depth Ft	N_2 Rate CFM	Brine Rate B/D	Cum. Prod. Bbl	Bottom Hole Press (973') PSI	Surface Temp.*	ΔP
Initial Hydrostatic		-95						385.85		
		-11						380.71		0
Start N_2 Injection	4:45 PM	0		800	100			502.30		
	(5/22/75)	3	.05					369.67		11 .04
		46	.75		75 @ 35 Min			369.55		11 .16
	5:54	69	1.2			459	20			
	6:05	80	1.3		100	501	24			
		84	1.4					370.18	240	10.53
	6:12	87	1.5			685	27		250	
		91		997		215	30			
	6:29	104		Note:		636	86		252	
		113		Tube Stopped		766	41			
		121.2		On Sub About				370.07	257	10.64
	6:57	132		Packer - Could	150	944	53		258	
		150		Not Move		892	59		259	
		1582.6		Deeper				370.69		10.02
		165				827	73		260	
		182				649	80			
		196	3.3					371.31		9.40
		215				837	100		265	
		233	3.9					371.93		8.78
From 9:10 - 10:42 N_2 Was	9:10	265				772	126		269	
Shut Off To Let Mill		270	4.5		0	220		373.29		7.42
Flow & Take Pressure		308	5.1		1			373.18	238	7.53
Sample w/o N_2. Flow		346	5.8		150			373.18		7.53
Rate ± 220 B/D		383	6.6					373.18		7.53
	11:30	405				689	164		265	
		420	7.0					373.18		7.53
	12:00M	435			100	735	180		262	
	(5/23/75)	457	7.6					371.28		9.43

Soda Lake 1-29 Prodtest #1 (Cont'd)

	Real Time	Elapsed Time Min	Nowsco Tube Depth Ft	N_2 Rate CFM	Brine Rate BPD	Cum Prod BBL	Bottom Hole Press (9735') PSI	Surface Temp. * °F	ΔP
		1948.2	947	100			368.98		
From 1:20 To 3:42 Gage	1:20 AM	5158.6			707	219		257	11.78
To Mins Drained & No		5328.9			565		369.60		11.11
Gages Taken. Assume		5699.5					367.29		13.42
565 B/D Rate		6061.1				Assumed	367.91		12.80
		6431.7					367.91		12.80
Shut Off N_2 @ 3:50 (165 M)	3:42	607		0				270	
While Flowing		680 11.3					367.91	242	12.80
	4:34	709			424	290			
		718 11.9					368.32		12.39
	4:46	721			230	292			
	5:00	735			295	295			
SI @ Surf For Final	5:21	756 12.6	60			301	368.94		11.77
		793 13.2					369.56		11.15
		830 13.8					370.18		10.53
		868 14.5					370.07		10.64
		905 15.1					369.96		10.75
		942 15.7					367.67		13.04
		979 16.3					367.67		13.04
		1016 16.9					367.67		13.04
		1054 17.6					365.87		14.84
		1092 18.2	0				362.10		18.61
Pump H_2O Down Tbg To	11:00	1095					434.90		
Cool & Kill Well		1102					440.04		
		1108					454.04		
		1110					476.17		
		1122					489.29		
Final Hydrostatic		1123					389.11		

* Surface Temperature Was Measured With A Contact Thermometer Attached To The Outside Of The Flow Line. These Readings Are Affected By Ambient Temp. & Wind Conditions & Are At Least 10°F Low

Job Lane 1-29 Prod. Test #2 5/24/75

	Real Time	Elapsed Time	Nowsco Tube Depth	N_2 Rate	Brine Rate	Cum. Prod	Bottom Hole Pressure (760')	Surface Temp
		Min.	Ft.	CFM	BPH	Bbl	PSI	°F
	5/24/75							
Start N_2 Ins	3:53 AM	0	700	100	-	-		
	4:16	23			872	12		100
	4:31	38			922	21		
	5:01	68		200				133
	5:16	83			528	60		
	5:22	89			722	53		142
	5:30	97			1132	69		144
	5:32	99		300				
	5:46	113		100				
	5:49	116			727	69		144
	5:59	126			835	75		163
	6:07	134			1381	83		174
	6:34	161			1072	103		194
No Gages Taken - Tank Drained	6:58	185			1380	126	Electronic Well Not Functioning	210
	8:35	282			1200 Est	207		217
	8:54	301			1016	220		244
	9:07	314			850	228		248
No Gages Taken - Tank Draining	9:27	334			1102	243		258
	10:15	SI N_2 To Take Pressure Sample						200
	10:58	425		100	840 Est	296		
	11:12	439		50-100	586	302		231
Stop N_2	11:25	452	100	0	0	307		240
S.I. At Surface	11:30	457						
Pumpin H_2O To Cool Mill	5:15 PM	802						
Full Packer	5:30	817						

GEOLABS
1160 Simms Street
Lakewood, Colorado
Phone (303) 237-5122

Mailing Address:
P.O. Box 702
Edgemont Branch
Golden, Colo. 80401

233-8155

June 18, 1975
Job: 5-989

RJA

MINERALS STAFF
JUN 30 1975

File Soda Lake 29-

3-9-W95424c

A DIVISION OF
NATURAL RESOURCES LABORATORY, INC.

Mr. Roger F. Allmendinger
Chevron Oil Company
225 Bush St.
San Francisco, California 94104

REPORT OF ANALYSES

All analyses reported in mg/l.

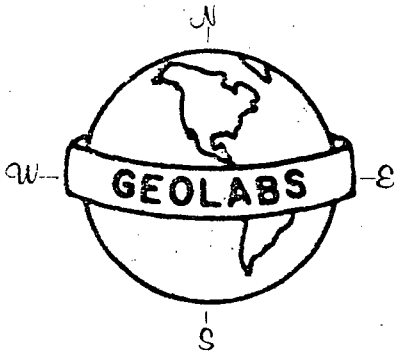
Sample	F^-	Cl^-	$CO_3^=$	HCO_3^-	$SO_4^=$	SiO_2*	TDS**
SL1-5	1.9	2550	22	150	160	31.6	5220
SL1-10	1.9	2850	25	135	120	30.8	4900
SL2-3	1.4	2500	N.D.	150	120	138	4700
SL2-5	1.4	2480	N.D.	155	120	28.7	4700
SL2-6	1.7	2580	13	115	120	29.4	4670
SL2-7	1.6	2950	N.D.	105	110	30.1	4740

Sample	pH	K, umho/cm	U	Na	K	Ca	Mg	Li
SL1-5	8.6	8000	-	1600	160	75	8	2.6
SL1-10	8.6	7490	<0.002	1520	160	86	10	2.6
SL2-3	8.0	7490	-	1480	160	97	1	2.6
SL2-5	8.2	7460	<0.002	1480	150	96	1	2.6
SL2-6	8.4	7700	<0.002	1500	160	96	<1	2.6
SL2-7	8.4	7800	-	1520	160	86	1	2.6

Sample	B	As	Al	Cu	Pb	Zn	Fe	Mn	Hg
SL1-5	10.0	0.05	-	-	-	-	-	-	-
SL1-10	10.0	0.05	24.	0.020	<0.5	0.20	70	1.7	<0.0001
SL2-3	10.0	0.05	-	-	-	-	-	-	-
SL2-5	10.0	0.05	0.40	0.075	0.15	0.25	0.95	0.2	0.0001
SL2-6	10.0	0.05	0.40	0.050	0.12	0.24	0.60	<0.1	0.0001
SL2-7	10.0	0.05	-	-	-	-	-	-	-

*SiO_2 analyses on diluted sample as provided; no diluted sample available for SL2-3 and analysis on raw sample.
**TDS - Total dissolved solids.
N.D. - not detectable by definition (pH < 8.3)

GEOLABS
1100 Simms Street
Lakewood, Colorado
Phone (303) 237-5122



Mailing Address:
P.O. Box 702
Edgemont Branch
Golden, Colo. 80401

A DIVISION OF

NATURAL RESOURCES LABORATORY, INC.

Cu, Pb, Zn run by AA-chelation/extraction due to interference in direct aspiration from high alkalis. Sample SL1-10 reported to <0.5 mg/l Pb due to interference from High Fe. High Fe, Al on this sample may be due to acid leaching of sediment in the sample.

Ronald L. Keil

PRODUCTION RECORD

Test #1 - May 22, 1975 (4:54 PM) - May 23, 1975 (5:12 AM)

Time	Tank Depth	Inches	Cumulative Inches	Cumulative Barrels	Barrels	Bbl./day Rate
5:45	4.5	-	-	-	-	-
5:54	5.25	.75	.75	2.87	2.87	459
6:05	6.25	1	1.75	6.7	3.83	501
6:12	7.12	.87	2.62	10.03	3.33	685
6:16	8.0	.88	3.5	13.40	3.37	1213
6:29	9.5	1.5	5.0	19.15	5.74	636
6:38	10.75	1.25	6.25	23.94	4.79	766
6:57	14.0	3.25	9.5	36.38	12.45	944
7:15	16.75	2.75	12.25	46.92	10.53	892
7:30	19.0	2.25	14.5	55.54	8.62	827
7:47	21.0	2.0	16.5	63.3	7.66	649
8:20	26	5	21.5	82.4	19.18	837
9:10	33	7	28.5	109.3	26.84	773
DRAIN PIT						
10:42	19	-	-	-	-	-
11:30	25	6	34.5	132.3	23.01	690
12:00	29	4	38.5	147.6	15.34	736
1:10	39.25	10.25	48.75	187.0	39.31	708
DRAIN PIT						
3:42	29	-	-	-	-	-
4:34	33	4	52.75	202.3	15.34	425
4:46	33.5	.5	53.25	204.2	1.92	230
5:00	34.25	.75	54.0	207.1	2.88	296

PRODUCTION RECORD

Test #2 - May 24, 1975 (3:57 AM - 11:30 AM)

Time	Tank Depth	Inches	Cumulative Inches	Cumulative Barrels	Barrels	Bbl./day Rate
3:57	9	-	-	-	-	-
4:16	12	3	3	11.50	11.5	872
4:31	14.5	2.5	5.5	21.1	9.6	922
4:56	19	4.5	10	38.4	17.3	996
5:16	22	3	13	49.9	11.5	828
5:22	22.85	0.85	13.85	53.1	3.3	792
5:30	24.5	1.65	15.5	59.4	6.33	1139
5:49	27	2.5	18	69.03	9.6	727
5:59	28.5	1.5	19.5	74.8	5.8	835
6:07	30.5	2.0	21.5	82.5	7.67	1381
6:34	35.75	5.25	26.75	102.6	20.1	1072
6:58	41.75	6.0	32.75	125.6	23.0	1380
DRAIN						
8:35	32.5	-	-	-	-	-
8:54	36.0	3.5	36.25	139.0	13.4	1016
9:07	38.0	2.0	38.25	146.7	7.67	850
9:27	42.0	4.0	42.25	162.0	15.3	1102
DRAIN						
10:53	27	-	-	-	-	-
11:12	28.5	1.5	43.75	16.78	5.7	586

Estimated volumes produced while tank was being drained

TEST PERIOD #1

1. 220 bbl/day × 1.5 hrs = 14.8 bbl.
2. 565 bbl/day × 2.33 hrs = 54.8 bbl.

TEST PERIOD #2

1. 1200 bbl/day × 1.6 hrs = 80.8 bbl.
2. 840 bbl/day × 1.5 hrs = 52.5 bbl.

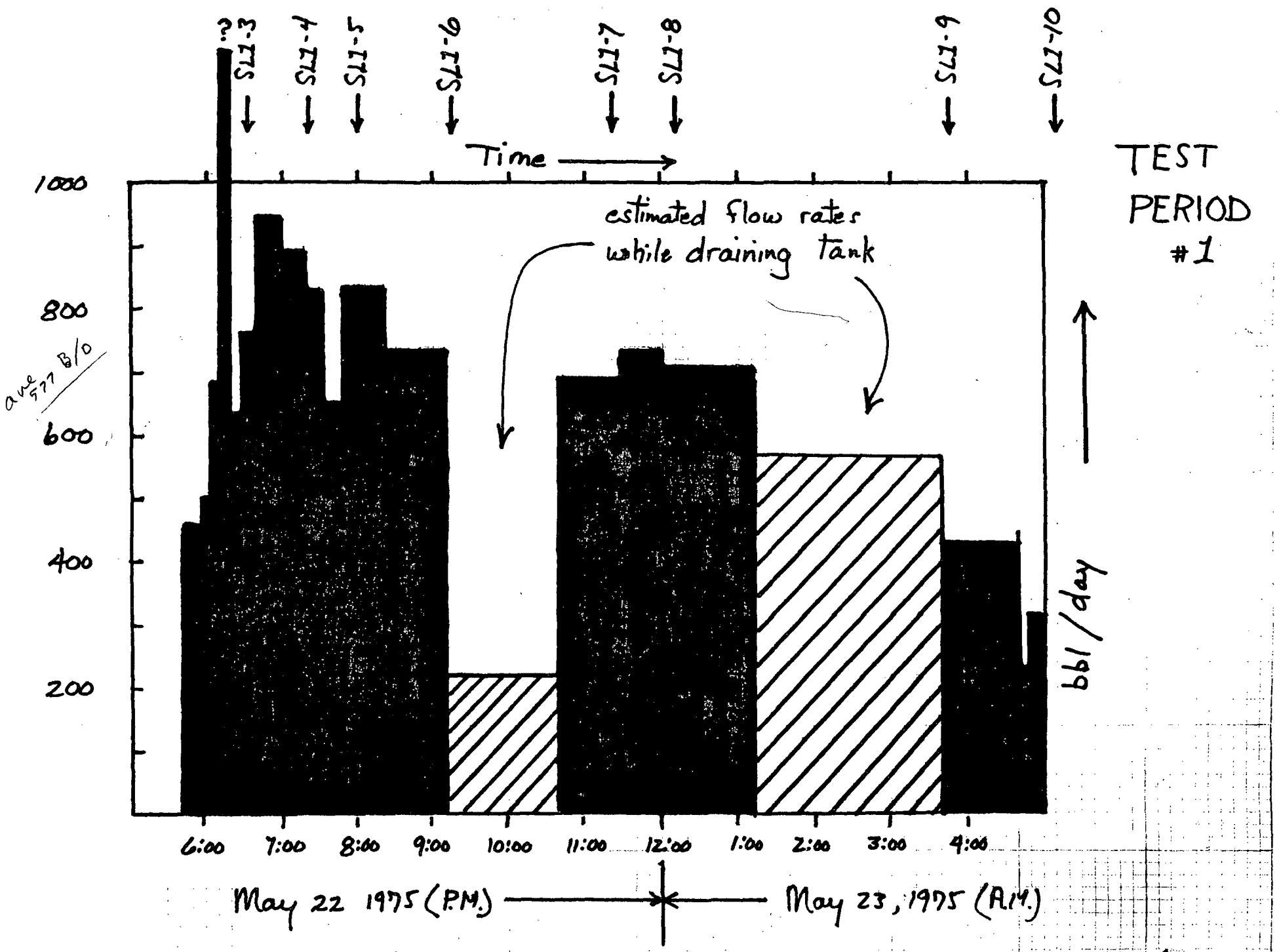
Total production

Test # 1

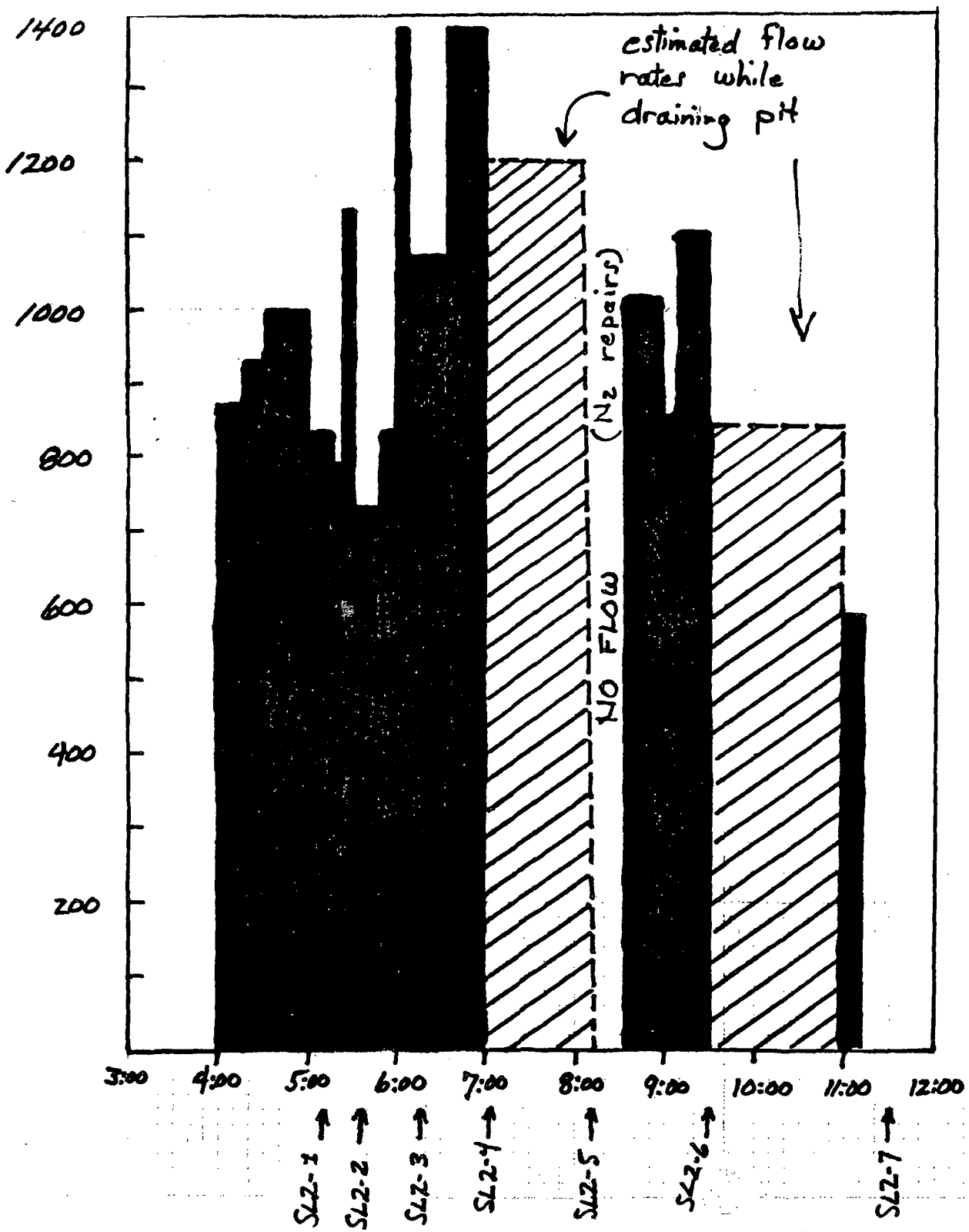
14.8
54.8
+ 207.1
276.7

Test # 2

80.8
52.5
+ 178.8
312.1


?
SLT-3
SLT-4
SLT-5
SLT-6
SLT-7
SLT-8
SLT-9
SLT-10
Time
TEST PERIOD #1
estimated flow rates while draining tank
1000
800
600
400
200
ave 577 B/D
bbl/day
6:00
7:00
8:00
9:00
10:00
11:00
12:00
1:00
2:00
3:00
4:00
May 22 1975 (P.M.)
May 23, 1975 (A.M.)

TEST PERIOD #2



SKYLINE LABS, INC.
SPECIALISTS IN EXPLORATION GEOCHEMISTRY
12090 WEST 50TH PLACE • WHEAT RIDGE, COLORADO 80033 • TEL.: (303) 424-7718

REPORT OF ANALYSIS

Job No. 120154
June 11, 1975

Chevron Oil Company
Minerals Staff
225 Bush Street
San Francisco, California 94104

Attention: Roger J. Allmendinger

SiO_2 AA method

pretreat?

Analysis of 13 Water Samples

Item	Sample No.	Li (mg/l)	Na (mg/l) AA	K (mg/l)	Mg (mg/l)	Ca (mg/l)	Al (mg/l)	Mn (mg/l)
1.	SL1-3 Acid	2.8	1,710.	170	21.	355.	*	*
2.	4 Acid	3.0	1,570.	220	20.	210.	*	*
3.	5 Acid	3.0	1,550.	180	8.9	94.	15.	.51
4.	6 Acid	2.9	1,490.	160	10.	100.	*	*
5.	7 Acid	2.8	1,420.	160	7.5	98.	*	*
6.	8 Acid	3.0	1,500.	150	9.2	110.	*	*
7.	9 Acid	2.9	1,430.	140	12.	115.	*	*
8.	SL1-10 Acid	2.9	1,400.	130	17.	130.	25.	1.1
9.	SL2-1 Acid	2.9	1,380.	140	1.8	105.	*	*
10.	2 Acid	2.9	1,350.	130	1.5	100.	*	*
11.	3 Acid	2.8	1,330.	140.	1.1	100.	*	*
12.	SL2-4 Acid	2.8	1,340.	140.	.90	98.	2.0	.09
13.	SL2-H_2O	*	1.0	<.1	*	.14	*	*

Item	Sample No.	Cu (mg/l)	Pb (mg/l)	Zn (mg/l)	Fe (mg/l)	U (ppb)	Hg (mg/l)
1.	SL1-5 Acid	.012	<.02	.10	26.	3	<.005
2.	SL1-10 Acid	.014	.02	.16	50.	<2	<.005
3.	SL2-4 Acid	.13	.30	.70	1.0	<2	<.005

Item	Sample No.	As (mg/l)	B (mg/l)	SO_4 (mg/l)	F (mg/l)	Cl (mg/l)	CO_3 (mg/l)
1.	SL1-3 Raw	.12	11.	200.	2.0	2,120.	86
2.	4 Raw	.10	12.	40.	2.0	1,900.	36
3.	5 Raw	<.05	12.	20.	2.0	1,990.	32
4.	6 Raw	.07	12.	20.	2.0	2,040.	34
5.	7 Raw	<.05	11.	20.	2.0	1,975.	22
6.	8 Raw	<.05	12.	10.	2.0	1,975.	30
7.	9 Raw	<.05	11.	20.	.19	1,860.	28
8.	SL1-10 Raw	.12	11.	50.	.18	2,130.	30
9.	SL2-1 Raw	.10	11.	10.	.15	1,960.	<2
10.	2 Raw	.05	11.	10.	.15	1,790.	<2
11.	3 Raw	<.05	11.	10.	.16	2,150.	<2
12.	SL2-4 Raw	<.05	12.	10.	.16	1,990.	10
13.	SL2-H_2O	*	*	<2.	*	<1.0	*

Item	Sample No.	HCO_3 (mg/l)	T.D.S. by Evaporation (mg/l)	pH	Specific Conductivity (micromhos/cm)
1.	SL1-3 Raw	225.	6,540.	9.3	6,820
2.	4 Raw	130.	5,250.	9.0	6,780
3.	5 Raw	100.	4,810.	8.9	6,450
4.	6 Raw	86.	4,950.	8.9	6,570
5.	7 Raw	130.	4,220.	8.7	6,330
6.	8 Raw	80.	4,770.	8.8	6,710
7.	9 Raw	78.	4,160.	8.8	6,620
8.	SL1-10 Raw	105.	4,480.	8.8	6,460
9.	SL2-1 Raw	130.	4,380.	7.8	6,510
10.	2 Raw	130.	4,510.	8.2	6,520
11.	3 Raw	130.	3,610.	8.1	6,270
12.	SL2-4 Raw	105.	4,310.	8.4	6,390
13.	SL2-H_2O	2.	*	*	*

Item	Sample No.	SiO_2 (mg/1)
1.	SL1-3 Raw	190.
2.	4 Raw	195.
3.	5 Dil	60.
4.	6 Raw	240.
5.	7 Dil	30.
6.	8 Raw	205.
7.	9 Dil	48.
8.	SL1-10 Dil	45.
9.	SL2-1 Raw	220.
10.	2 Raw	205.
11.	3 Dil	30.
12.	SL2-4 Dil	30.
13.	SL2-H_2O	<.5

* Analysis not requested.

Note:

H_2O = Distilled water, Acid = Acidified sample, Dil = Diluted sample

Charles E. Thompson
Chief Chemist