



12-135-20W

FORMATION TESTING SERVICE REPORT

CRUDE OIL TESTING, INC.

DATE 10/23/83

TEST TICKET NO. 3686

Company: Graham-Michaelis Corp.
 Company Address: P.O. Box 247 Wichita KS 67201
 Location: Sec. 12 Twp. 13S Range 20W Co. Ellis State KS
 Well Name & Number: Jacques #1-12 Code E16

ENGINEERING DATA	Elevation	2096 KB	Drill Pipe Length	3258	ID 3.8 "
	Mud Viscosity	42	Weight Pipe Length		
	Mud Weight	9.9	Drill Collar Length		
	Water Loss	11.2	Top Packer Depth	3365	
	Type of Mud	Starch	Bottom Packer Depth	3370	
	Anchor Length	90	Tool Joint Size	4.5 FH	
	Hole Size	7 7/8	Test Tool Size	5 1/2	
	Casing Size	8 5/8	Packer Size	6 3/4	
	Surface Choke	3/4	Reversed Out	No	
	Bottom Choke	3/4	Recorder #	13253	
	Extra Equipment		None		

REMARKS DST #1

FORMATION	Toronto & KC Zone A-B	Test Type Conventional
	Interval 3370 To 3460	Total Depth 3460
	Open 60 Shut In 45	Open 30 Shut In 90
	Packer(s) Set 10:45AM	Started Off Bottom 02:30PM
	Blow 1st Opening Weak slowly increasing to 2 in. in bucket 2nd Opening Weak blow 1/2 in. in bucket	

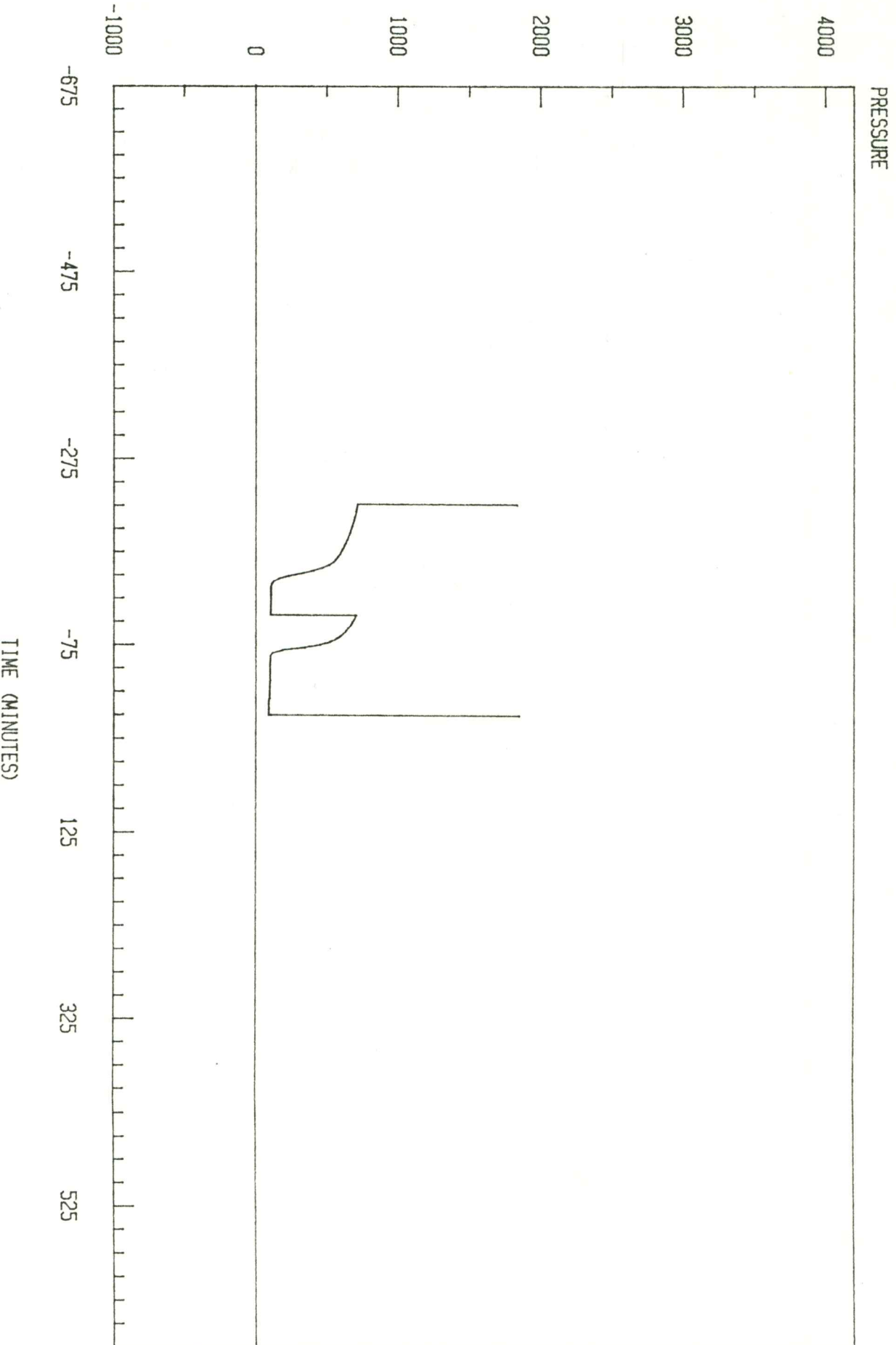
RECOVERY Total Feet 60
 Recovered 60 feet of Oil cut mud

CALCULATED RECOVERY	Gas	Oil	15	Water	6	Mud	39
	Gravity (Oil)			Test Water Chlorides			PPM
	Test Area Temperature	116F		Mud System Chlorides	38,000		PPM

		FIELD READING	OFFICE READING	
PRESSURE	(A) Initial Hydrostatic Mud	1825	1851	PSI
	(B) First Initial Flow Pressure	77	90	PSI
	(C) First Final Flow Pressure	77	101	PSI
	(D) Initial Closed-In Pressure	703	705	PSI
	(E) Second Initial Flow Pressure	88	103	PSI
	(F) Second Final Flow Pressure	88	106	PSI
	(G) Final Closed-In Pressure	703	715	PSI
	(H) Final Hydrostatic Mud	1802	1831	PSI

CRUDE OIL TESTING INC Test 3686 DST 1

FOR: Graham-Michaelis Corp. 10/23/83



CALCULATED RECOVERY ANALYSIS

DST Number: 1

TEST TICKET NO. 3686

Sample #	Total Feet	***** Gas %	**** Feet	***** Oil %	**** Feet	***** Mud %	**** Feet
1	60	0.00	0.00	25.00	15.00	65.00	39.00
TOTAL	<u>60</u>	0.00	<u>0.00</u>	25.00	<u>15.00</u>	65.00	<u>39.00</u>

Sample #	**** Water %	*** Feet	Chlorides (PPM)	Resistivity (Ohms)	Temperature (Deg)
1	10.00	6.00			
TOTAL	10.00	<u>6.00</u>			

EQUIPMENT DATA

TOOL SEQUENCE REPORT

DST Number: 1

TEST TICKET NO. 3686

WELL NAME: Jacques #1-12

WELL LOCATION: 12-13S-20W

Tool #	Tool	Length	I.D.	O.D.
1	Drill Pipe - 4.5"	3258.00	3.826	4.50
8	Circulating Sub	1.00	3.000	5.00
9	Shut-In Tool	5.45	0.870	5.00
10	Hydraulic Tool	5.60	1.000	5.00
14	Packer	5.35	1.530	6.75
14	Packer	5.35	1.530	6.75
6	Anchor	86.00	2.750	5.00
15	Recorder Carrier	1.00		5.00
16	Bull Plug	2.00		5.00
	Total Depth	3369.75		

CRUDE OIL TESTING, INC.

DATE 10/24/83

TEST TICKET NO. 3687

Company: Graham-Michaelis Corp.
 Company Address: P. O. Box 247 Wichita KS 67201
 Location: Sec. 12 Twp. 13S Range 20W Co. Ellis State KS
 Well Name & Number: Jacques #1-12 Code E16

ENGINEERING DATA	Elevation	2096 KB	Drill Pipe Length	3431	ID 3.8 "
	Mud Viscosity	43	Weight Pipe Length		
	Mud Weight	10	Drill Collar Length		
	Water Loss	11.2	Top Packer Depth	3519	
	Type of Mud	Starch	Bottom Packer Depth	3524	
	Anchor Length	71	Tool Joint Size	4.5 FH	
	Hole Size	7 7/8	Test Tool Size	5 1/2	
	Casing Size	8 5/8	Packer Size	6 3/4	
	Surface Choke	3/4	Reversed Out	No	
	Bottom Choke	3/4	Recorder #	13253	
	Extra Equipment		None		

REMARKS DST #2

FORMATION	Kansas City Zone G H I	Test Type Conventional
	Interval 3524 To 3595	Total Depth 3595
	Open 30 Shut In 60	Open 30 Shut In 60
	Packer(s) Set 12:30PM	Started Off Bottom 03:30PM
	Blow 1st Opening Weak blow died in 7 min. 2nd Opening No blow	

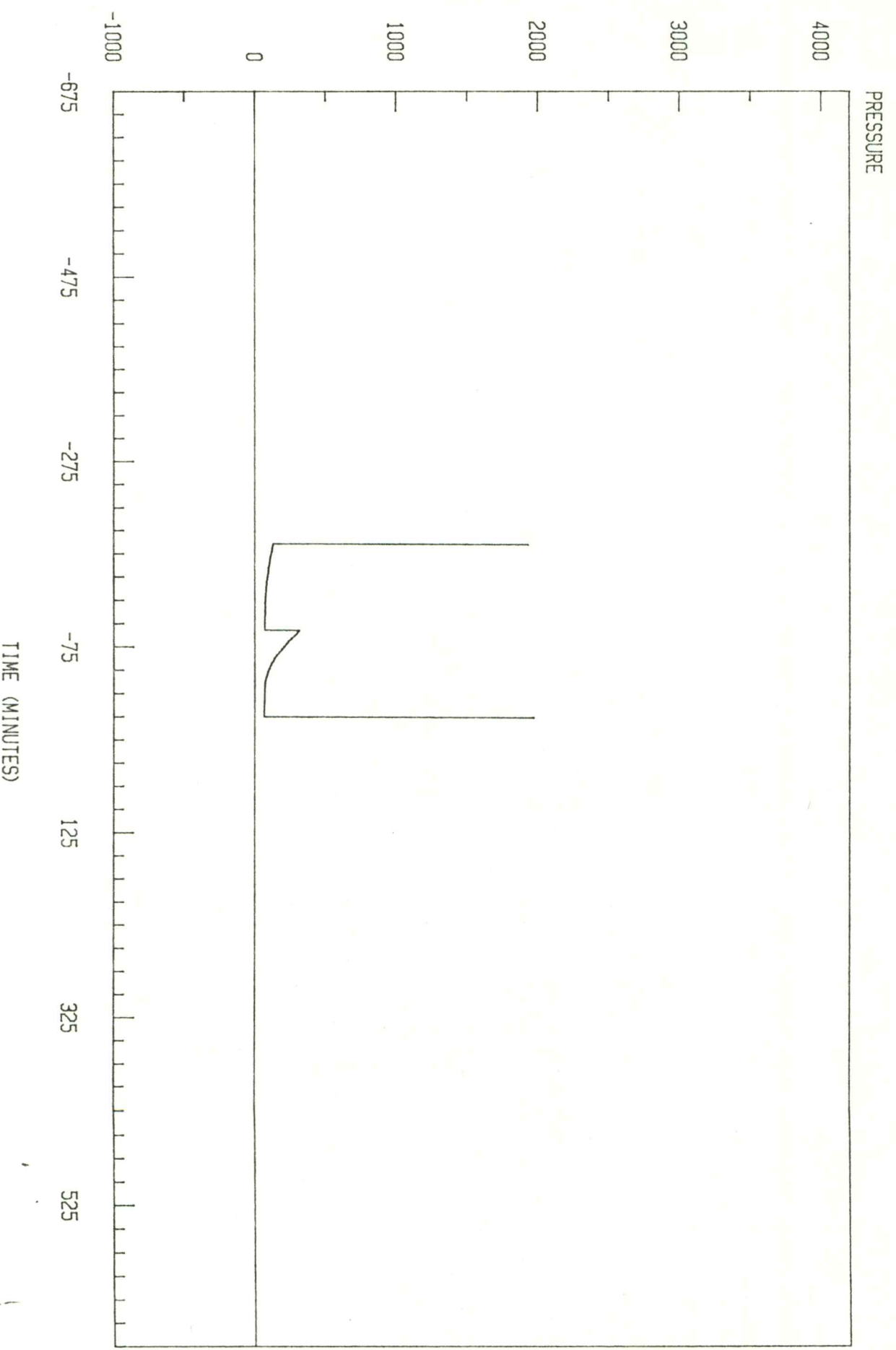
RECOVERY Total Feet 10
 Recovered 10 feet of Drilling mud

CALCULATED RECOVERY	Gas	Oil	Water	Mud
	Gravity (Oil)		Test Water Chlorides	PPM
	Test Area Temperature 116F		Mud System Chlorides	34,000 PPM

		FIELD READING	OFFICE READING	
PRESSURE	(A) Initial Hydrostatic Mud	1859	1969	PSI
	(B) First Initial Flow Pressure	55	67	PSI
	(C) First Final Flow Pressure	55	70	PSI
	(D) Initial Closed-In Pressure	300	318	PSI
	(E) Second Initial Flow Pressure	55	69	PSI
	(F) Second Final Flow Pressure	55	73	PSI
	(G) Final Closed-In Pressure	115	131	PSI
	(H) Final Hydrostatic Mud	1836	1929	PSI

CRUDE OIL TESTING INC Test 3687 DST 2

FOR: Graham-Michaelis Corp. 10/24/83



PRESSURE BREAKDOWN

TEST TICKET NO. 3687

DST Number: 2 Recorder Number: 13253 Clock Number: 23934

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Mins.	Press.	Mins.	Press.	Mins.	Press.	Mins.	Press.
0	66	0	70	0	69	0	72
3	66	3	70	3	69	3	73
6	66	6	72	6	69	6	74
9	66	9	76	9	70	9	76
12	67	12	80	12	70	12	77
15	67	15	87	15	70	15	78
18	69	18	93	18	72	18	81
21	69	21	101	21	72	21	82
24	69	24	110	24	72	24	86
27	70	27	119	27	72	27	89
30	70	30	132	30	72	30	92
		33	143			33	94
		36	157			36	96
		39	175			39	101
		42	192			42	104
		45	208			45	107
		48	224			48	110
		51	240			51	115
		54	261			54	119
		57	283			57	122
		60	303			60	126
		63	317			63	131

EQUIPMENT DATA
TOOL SEQUENCE REPORT

DST Number: 2

TEST TICKET NO. 3687

WELL NAME: Jacques #1-12

WELL LOCATION: 12-13S-20W

Tool #	Tool	Length	I.D.	O.D.
1	Drill Pipe - 4.5"	3431.00	3.826	4.50
8	Circulating Sub	1.00	3.000	5.00
9	Shut-In Tool	5.45	0.870	5.00
10	Hydraulic Tool	5.60	1.000	5.00
14	Packer	5.35	1.530	6.75
14	Packer	5.35	1.530	6.75
6	Anchor	67.00	2.750	5.00
15	Recorder Carrier	1.00		5.00
16	Bull Plug	2.00		5.00
	Total Depth	3523.75		

CRUDE OIL TESTING, INC.

DATE 10/25/83

TEST TICKET NO. 3688

Company: Graham-Michaelis Corp.
 Company Address: P. O. Box 247 Wichita KS 67201
 Location: Sec. 12 Twp. 13S Range 20W Co. Ellis State KS
 Well Name & Number: Jacques #1-12 Code E15

ENGINEERING DATA	Elevation	2096 KB	Drill Pipe Length	3598	ID 3.8 "
	Mud Viscosity	43	Weight Pipe Length		
	Mud Weight	10	Drill Collar Length		
	Water Loss	11.2	Top Packer Depth	3589	
	Type of Mud	Starch	Bottom Packer Depth	3594	
	Anchor Length	41	Tool Joint Size	4.5 FH	
	Hole Size	7 7/8	Test Tool Size	5 1/2	
	Casing Size	8 5/8	Packer Size	6 3/4	
	Surface Choke	3/4	Reversed Out	No	
	Bottom Choke	3/4	Recorder #	13253	
	Extra Equipment		None		

REMARKS DST #3
 25 ft. gas in pipe

FORMATION Kansas City Zone J K Test Type Conventional
 Interval 3594 To 3635 Total Depth 3635
 Open 60 Shut In 45 Open 30 Shut In 90
 Packer(s) Set 03:43AM Started Off Bottom 07:30AM
 Blow 1st Opening Weak slowly increasing to 4 in. in bucket
 2nd Opening Weak slowly increasing to 2-1/2 in. in bkt.

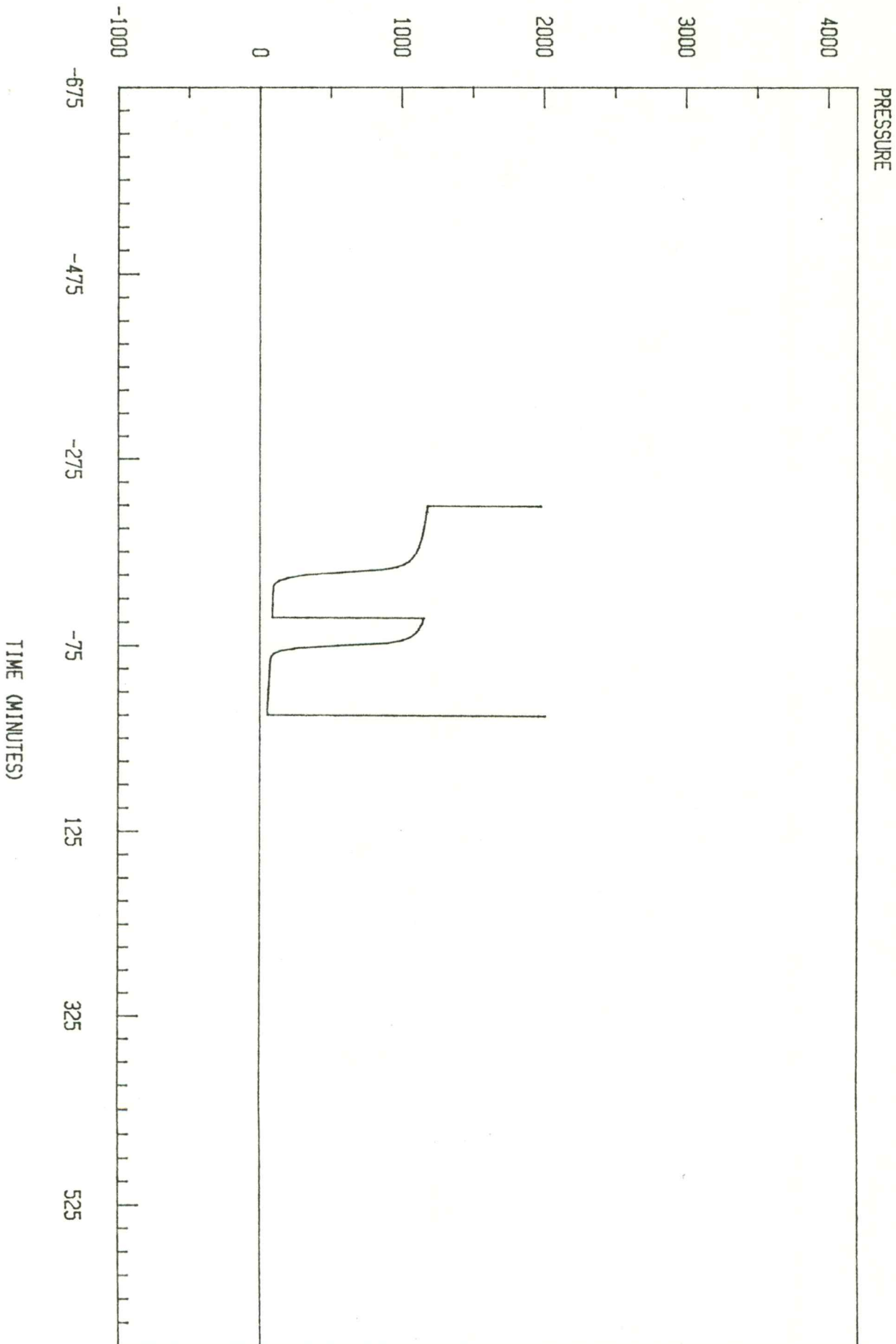
RECOVERY Total Feet 95
 Recovered 35 feet of Slightly watery gassy oil cut mud
 Recovered 60 feet of Slightly watery oil spotted mud
 Recovered 25 feet of Gas in pipe

CALCULATED RECOVERY Gas 5.25 Oil 13.55 Water 5.6 Mud 70.6
 Gravity (Oil) Test Water Chlorides PPM
 Test Area Temperature 102F Mud System Chlorides 34,000 PPM

		FIELD READING	OFFICE READING	
PRESSURE	(A) Initial Hydrostatic Mud	1995	2006	PSI
	(B) First Initial Flow Pressure	46	52	PSI
	(C) First Final Flow Pressure	58	75	PSI
	(D) Initial Closed-In Pressure	1150	1154	PSI
	(E) Second Initial Flow Pressure	81	84	PSI
	(F) Second Final Flow Pressure	93	92	PSI
	(G) Final Closed-In Pressure	1265	1179	PSI
	(H) Final Hydrostatic Mud	1973	1978	PSI

CRUDE OIL TESTING INC Test 3688 DST 3

FOR: Graham-Michaelis Corp. 10/25/83



CALCULATED RECOVERY ANALYSIS

DST Number: 3

TEST TICKET NO. 3688

Sample #	Total Feet	***** Gas %	***** Feet	***** Oil %	***** Feet	***** Mud %	***** Feet
1	35	15.00	5.25	25.00	8.75	56.00	19.60
2	60	0.00	0.00	8.00	4.80	85.00	51.00
TOTAL	<u>95</u>	5.53	<u>5.25</u>	14.26	<u>13.55</u>	74.32	<u>70.60</u>

Sample #	**** Water %	*** Feet	Chlorides (PPM)	Resistivity (Ohms)	Temperature (Deg)
1	4.00	1.40			
2	7.00	4.20			
TOTAL	5.89	<u>5.60</u>			

327-008

EQUIPMENT DATA

TOOL SEQUENCE REPORT

DST Number: 3

TEST TICKET NO. 3688

WELL NAME: Jacques #1-12

WELL LOCATION: 12-13S-20W

Tool #	Tool	Length	I.D.	O.D.
1	Drill Pipe - 4.5"	3598.00	3.826	4.50
8	Circulating Sub	1.00	3.000	5.00
9	Shut-In Tool	5.45	0.870	5.00
10	Hydraulic Tool	5.60	1.000	5.00
14	Packer	5.35	1.530	6.75
14	Packer	5.35	1.530	6.75
6	Anchor	37.00	2.750	5.00
15	Recorder Carrier	1.00		5.00
16	Bull Plug	2.00		5.00
	Total Depth	3660.75		

CRUDE OIL TESTING, INC.

DATE 10/26/83

TEST TICKET NO. 3700

Company: Graham-Michaelis Corp.
 Company Address: P. O. Box 247 Wichita KS 67201
 Location: Sec. 12 Twp. 13S Range 20W Co. Ellis State KS
 Well Name & Number: Jacques #1-12 Code E15

ENGINEERING DATA	Elevation	2096 KB	Drill Pipe Length	3721	ID 3.8 "
	Mud Viscosity	46	Weight Pipe Length		
	Mud Weight	9.7	Drill Collar Length		
	Water Loss	12.8	Top Packer Depth	3731	
	Type of Mud	Starch	Bottom Packer Depth	3736	
	Anchor Length	36	Tool Joint Size	4.5 FH	
	Hole Size	7 7/8	Test Tool Size	5 1/2	
	Casing Size	8 5/8	Packer Size	6 3/4	
	Surface Choke	3/4	Reversed Out	No	
	Bottom Choke	3/4	Recorder #	13253	
	Extra Equipment		None		

REMARKS DST #4

FORMATION Arbuckle Zone Test Type Conventional
 Interval 3736 To 3772 Total Depth 3772
 Open 30 Shut In 60 Open 30 Shut In 60
 Packer(s) Set 08:43AM Started Off Bottom 11:45AM
 Blow 1st Opening Weak blow died in 7 min.
 2nd Opening No blow flushed tool no help.

RECOVERY Total Feet 10
 Recovered 10 feet of Drilling mud with trace of oil on top

CALCULATED RECOVERY Gas .5 Oil Water 1 Mud 8.5
 Gravity (Oil) Test Water Chlorides PPM
 Test Area Temperature 110F Mud System Chlorides 32,000 PPM

		FIELD READING	OFFICE READING	
PRESSURE	(A) Initial Hydrostatic Mud	2076		PSI
	(B) First Initial Flow Pressure	46		PSI
	(C) First Final Flow Pressure	46		PSI
	(D) Initial Closed-In Pressure	162		PSI
	(E) Second Initial Flow Pressure	46		PSI
	(F) Second Final Flow Pressure	46		PSI
	(G) Final Closed-In Pressure	116		PSI
	(H) Final Hydrostatic Mud	2053		PSI

CALCULATED RECOVERY ANALYSIS

DST Number: 4

TEST TICKET NO. 3700

Sample #	Total Feet	***** Gas %	**** Feet	***** Oil %	**** Feet	***** Mud %	**** Feet
1	10	5.00	0.50	0.00	0.00	85.00	8.50
TOTAL	<u>10</u>	5.00	<u>0.50</u>	0.00	<u>0.00</u>	85.00	<u>8.50</u>

Sample #	**** Water %	*** Feet	Chlorides (PPM)	Resistivity (Ohms)	Temperature (Deg)
1	10.00	1.00			
TOTAL	10.00	<u>1.00</u>			

EQUIPMENT DATA

TOOL SEQUENCE REPORT

DST Number: 4

TEST TICKET NO. 3700

WELL NAME: Jacques #1-12

WELL LOCATION: 12-13S-20W

Tool #	Tool	Length	I.D.	O.D.
1	Drill Pipe - 4.5"	3721.00	3.826	4.50
8	Circulating Sub	1.00	3.000	5.00
9	Shut-In Tool	5.45	0.870	5.00
10	Hydraulic Tool	5.60	1.000	5.00
14	Packer	5.35	1.530	6.75
14	Packer	5.35	1.530	6.75
6	Anchor	32.00	2.750	5.00
15	Recorder Carrier	1.00		5.00
16	Bull Plug	2.00		5.00
	Total Depth	3778.75		

CRUDE OIL TESTING, INC.

DATE 10/27/83

TEST TICKET NO. 3701

Company: Graham-Michaelis Corp.
 Company Address: P. O. Box 247 Wichita KS 67201
 Location: Sec. 12 Twp. 13S Range 20W Co. Ellis State KS
 Well Name & Number: Jacques #1-12 Code E15

ENGINEERING DATA	Elevation	2096 KB	Drill Pipe Length	3709	ID 3.8 "
	Mud Viscosity	48	Weight Pipe Length		
	Mud Weight	10	Drill Collar Length		
	Water Loss	8	Top Packer Depth	3650	
	Type of Mud	Starch	Bottom Packer Depth	3655	
	Anchor Length	132	Tool Joint Size	4.5	FH
	Hole Size	7 7/8	Test Tool Size	5 1/2	
	Casing Size	8 5/8	Packer Size	6 3/4	
	Surface Choke	3/4	Reversed Out	No	
	Bottom Choke	3/4	Recorder #	13253	
	Extra Equipment		None		

REMARKS DST #5

FORMATION	Arbuckle	Zone	Test Type	Conventional
	Interval 3655	To 3787	Total Depth	3787
	Open 30	Shut In 60	Open 30	Shut In 63
	Packer(s) Set	12:58PM	Started Off Bottom	04:00PM
	Blow 1st Opening Weak decreasing blow died in 14 min.			
	2nd Opening Weak decreasing blow died in 6 min.			

RECOVERY Total Feet 20
 Recovered 20 feet of Drilling mud

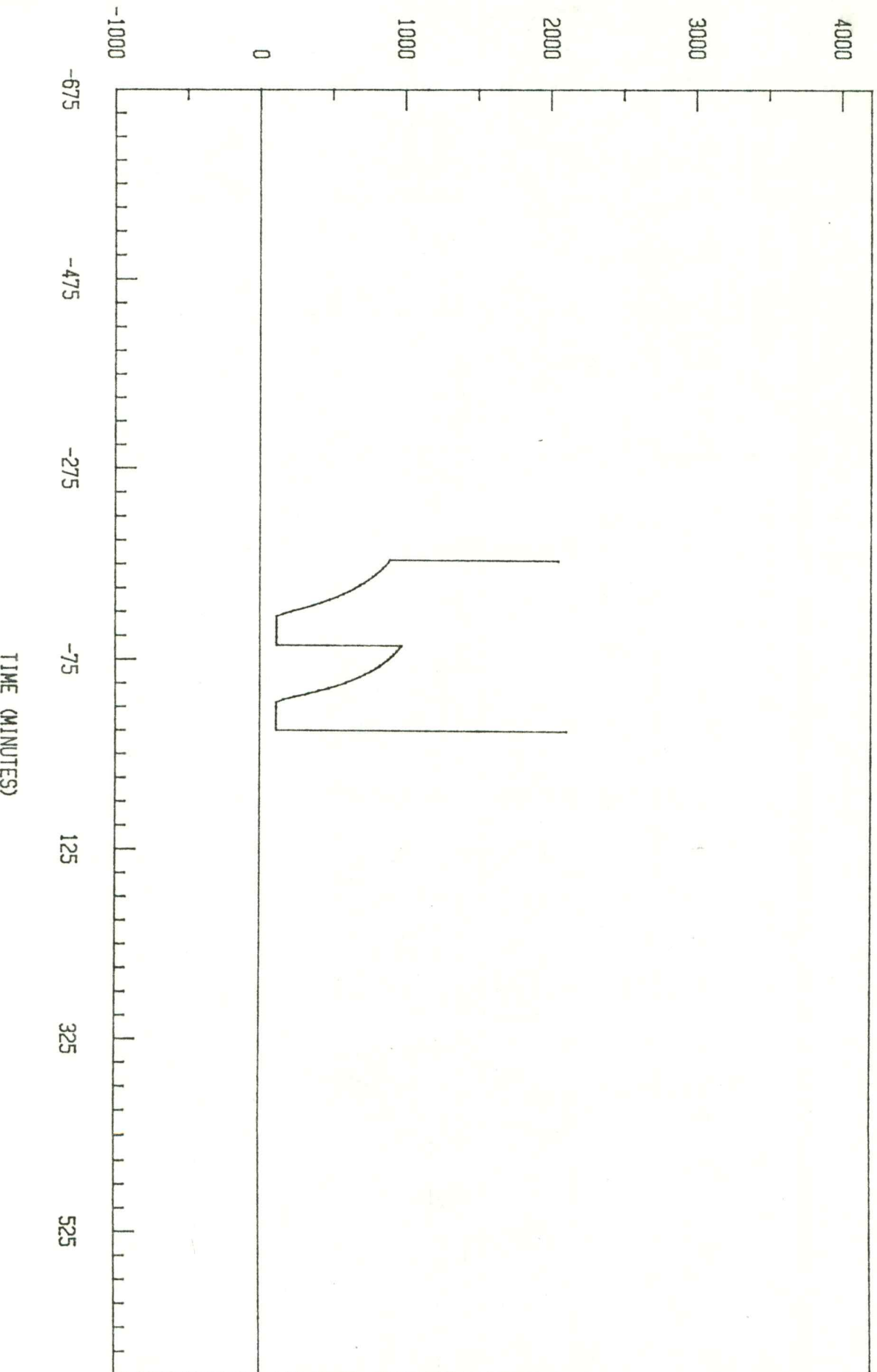
CALCULATED RECOVERY	Gas	Oil	Water	1	Mud	19
	Gravity (Oil)		Test Water Chlorides			PPM
	Test Area Temperature	<u>102F</u>	Mud System Chlorides		30,000	PPM

		FIELD READING	OFFICE READING	
PRESSURE	(A) Initial Hydrostatic Mud	2099	2109	PSI
	(B) First Initial Flow Pressure	116	108	PSI
	(C) First Final Flow Pressure	116	111	PSI
	(D) Initial Closed-In Pressure	966	973	PSI
	(E) Second Initial Flow Pressure	116	111	PSI
	(F) Second Final Flow Pressure	116	112	PSI
	(G) Final Closed-In Pressure	886	891	PSI
	(H) Final Hydrostatic Mud	2076	2051	PSI

CRUDE OIL TESTING INC Test 3701 DST 5

FOR: Graham-Michaelis Corp. 10/27/83

PRESSURE



PRESSURE BREAKDOWN

TEST TICKET NO. 3701

DST Number: 5 Recorder Number: 13253 Clock Number: 23934

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Mins.	Press.	Mins.	Press.	Mins.	Press.	Mins.	Press.
0	108	0	110	0	110	0	111
3	108	3	157	3	110	3	161
6	109	6	236	6	110	6	225
9	109	9	323	9	111	9	300
12	109	12	399	12	111	12	367
15	109	15	473	15	111	15	425
18	109	18	536	18	111	18	479
21	109	21	589	21	111	21	529
24	110	24	640	24	111	24	572
27	110	27	687	27	111	27	615
30	110	30	724	30	111	30	652
		33	763			33	686
		36	796			36	721
		39	826			39	749
		42	853			42	775
		45	880			45	799
		48	900			48	824
		51	923			51	844
		54	940			54	864
		57	958			57	883
		60	972			60	891

CALCULATED RECOVERY ANALYSIS

DST Number: 5

TEST TICKET NO. 3701

Sample #	Total Feet	***** Gas %	**** Feet	***** Oil %	**** Feet	***** Mud %	**** Feet
1	20	0.00	0.00	0.00	0.00	95.00	19.00
TOTAL	<u>20</u>	0.00	<u>0.00</u>	0.00	<u>0.00</u>	95.00	<u>19.00</u>

Sample #	**** Water %	*** Feet	Chlorides (PPM)	Resistivity (Ohms)	Temperature (Deg)
1	5.00	1.00			
TOTAL	5.00	<u>1.00</u>			

EQUIPMENT DATA
TOOL SEQUENCE REPORT

DST Number: 5

TEST TICKET NO. 3701

WELL NAME: Jacques #1-12

WELL LOCATION: 12-13S-20W

Tool #	Tool	Length	I.D.	O.D.
1	Drill Pipe - 4.5"	3709.00	3.826	4.50
8	Circulating Sub	1.00	3.000	5.00
9	Shut-In Tool	5.45	0.870	5.00
10	Hydraulic Tool	5.60	1.000	5.00
14	Packer	5.35	1.530	6.75
14	Packer	5.35	1.530	6.75
6	Anchor	128.00	2.750	5.00
15	Recorder Carrier	1.00		5.00
16	Bull Plug	2.00		5.00
	Total Depth	3862.75		