

HOLE NO: X-6 SHEET 1 OF 1 DATE: 1-12-75 LOGGED BY: D. Starbuck COLLAR: \_\_\_\_\_ TD: \_\_\_\_\_

[illegible]

facilities not available for screening & washing of samples. \* 190' to 232' no chip samples collected -  
(i.e. - no core shaker, no rock, & no water for sample washing) no screens to collect samples

DEPTH	±MM	FRX	PP	ASSAY 10 20 30 40	GAL/ TON	REC ERQD	LITH.	DESCRIPTION
DJS 510								Oil shale - Dark - calcareous.
11			.42					- do -
12			.22					- do -
13			.30					- do -
14			.68	.72				- do - (514.41' - 514.52' non
15			.70					- do - uniform sandstone bed)
16								- do - (515.70' - 515.73' ss)
17			.10					- do -
18			.25	.75				- do -
19			.88					- do - - light - calcareous
520								Oil shale Dark
21								Oil shale Dark
22			.61					ss w/ dark oil shale beds
23								ss calcareous w/ lt. oil shale
24								- do -
25			.44					- do -
26			.68					- do -
27								ss, calcareous w/ dark oil shale
28								ss, calcareous w/ light oil shale bands
29								- do - (528.50 - 528.55
530			.00	.07	.69			- do - non calc drk ss)
31								- do -
32			.16					
33								
34								
35			.12	.19				ss, calcareous w/ dark oil shale bands
36								- do -
37			.20					- do -
38			.50					- do -
39			.73					ss, calcareous (w/ light oil shale
DJS 540			.63		540.70			- do - in fine bands)
41								- do -
42								
43			.12					OIL SHALE LOW TO MED GRADE
44								CREAM TO MED BROWN SOME
45								SAND LAYERS OIL SATURATED
46								
47			.24	.3				
48			.15					
49								540.25-36 SAND LAYER OIL SATURATED

COMMENTS:

510.71

Drilled 30.60'  
Recovered 30.58'

540.70

SANDSTONE (EKG)

HOLE NO: X-6 SHEET 2 OF 7 DATE: 14 JAN '75 LOGGED BY: W. MOULTON COLLAB: TD:  
15 JAN '75 DJ. STAIRBULK

DEPTH	±MM	FRX	PP	ASSAY 10 20 30 40	GAL TON	REC. ERGD	LITH.	DESCRIPTION
550			.57					LOW GRADE OIL SHALE
551	+130							
552								
553								
554								
555			.40					
556								
557								557.00-.20 OIL SATURATED SAND LENS
558								
559								
560								
561	+120							
562			.29					562.75-.35 OIL SATURATED SAND LAYER
563								
564								
565								
566			.37					
567			.37					LOW GRADE SHALE
568								
569								
570			.70					570.25-.571.03 SAND LAYER w/ contorted
571	+110		.03	.98	570.06			SAND silt lenses 571.73-571.8
572		VERTICAL	.45					discontinuous sand layer
73		8 1/4	.31					573.31-.35 coarse sand layer, 573.65-57
74			.05					sand-silt bed w/ vertical healed fracture
75			.03	.81				
76		VERTICAL	.57					Medium grade oil shale
77		1 1/2	.10	.18				577.02-.18 coarse grained ss layer
78			.46					oil saturated + vertical fracture
579			.48					[SHALE] silty, med-dk Brn., (Mod. to Y. Calc
580			.15	.44				w/ numerous, scattered CaCO <sub>3</sub> pisolites, ool. py-
581	+100		.35	.59				Hem.; much biotite
582			.11	.73				SS (tuffaceous), (582.20-.31), oil impreg., w/ ser.
583			.58					contorted, sh layers. do (583.23-.28)
584			.28	.81				
585			.44	.92				
586			.42					
587			.89					
588			.46					
589			.12	.90				pp coated coated w/ biot. & siderite (?)
590			.71					SS (tuffaceous), (590.02-.21), altered, oil sat.
591	+90		.96					do (591.48-.71)
592		.73	.73					
593		VERT	.66					
594		.65	.65					
595			.50					
596			.08					
597			.17					
598		.60	.02					
599		VERT	.95					SS (tuffaceous) (599.85-600.00) w/ Gilsomite Blebs

COMMENTS:

LAR: \_\_\_\_\_ TD: \_\_\_\_\_

- (602.50)

~~605.90-608.03~~ (605.90-608.03)

1 & centered, stly. calc

(left on bottom)

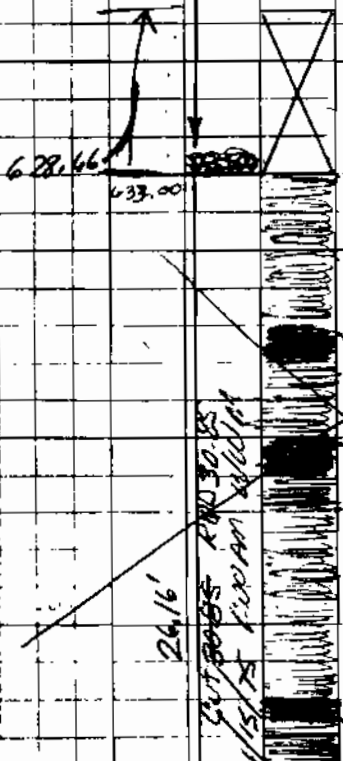
SMALL  
ALE WITH CONES  
HIGH GRADE  
TO LIGHT BROWN  
NES OF DARK

JE

HOLE NO: X-6 SHEET 3 OF 9 DATE: 15 JAN 75 LOGGED BY: E.C. GENTZLER COLLAR: TD:

COMMENTS: QAN E-100' WAS RECOVERED ON THE RUN INCLUDING 60'3" OF 94'4" LOST FIRST WAS RECOVERED ON THE NEXT RUN BUT FEETAGES WERE NOT ADJUSTED ACCORDINGLY BY W.M. ALL DEPTHS ARE IN LARGE BY 4.3" (E-100' WAS NOT RECOVERED)

DEPTH	±MM	FRX	PP	ASSAY 10 20 30 40	GAL TON	REC. REQD	LITH.	DESCRIPTION
600		vert.					+	
601	+80					602.50	X	} LOST CORE (601.46 - 602.50)
602								
603							+	
604								
605							++++	UPPER WAVEY BED <del>SS</del> (605.90-608) TUFF SS, highly altered & contorted, silty calc
606			.10				++	
607							++	
608			<del>125°</del> 1.77				++	
609							++++	
610							+	
611	+70						+	
612			.95				+	
613							+	
614							+	
615							++	
616							++	
617							+	
618			.17				++	
619							+	
620		.55				26.25 REC (4 30' ASSUMED LEFT ON BOTTOM)		
621	+60	vert.					+	
622		.84						
623							+	
624			.43			30.50' CUT - 5:30AM - 15 JAN '75 - ECG	+	
625							+	
626								
627			.13				+	
628			.66					
629							X	LOST CORE (presumed left on bottom)
630								
631								
632								
633								
634			.33					
635								
636								
637			.30					
638								
639			.6					
640								
641								
642			.14					
643								
644			.162					
645			.58					
646			.30					
647								
648								
649			.57					



SEE NOTE ①  
SMALL LOW GRADE OIL SHALE WITH ZONES OF MEDIUM TO HIGH GRADE SHALE - CREAM TO LIGHT BROWN AND SOME SMALL ZONES OF DARK BROWN.  
RICHER SHALE ZONE  
RICHER SHALE ZONE

HOLE NO: X-6 SHEET 3A OF 8 DATE: 1/15/75 LOGGED BY: \_\_\_\_\_ COLLAR: \_\_\_\_\_ TD: \_\_\_\_\_

DEPTH	±MM	FRX	PP	ASSAY				GAL/TON	REC. GRD	LITH.	DESCRIPTION
				10	20	30	40				
628											
629			.33								
630											
31	450										
32			.30								
33											
34			.20								
35											
36											
37			.14								
38											
39			.12								
640			.58								
41	440		.30								
42											
43											
44			.57								
45			.36								
46											
47			.50								
48			.75								
49			(.38) 59 (.86)								

628.66

LOW GRADE OIL SHALE WITH  
SMALL ZONES OF MEDIUM TO HIGH  
GRADE - CREAM TO LIGHT BROWN  
WITH ZONES OF BLACK

RICHIE SHALE ZONE

RICHIE SHALE ZONE

RICHIE SHALE ZONE

GRILLER D 30.14 FT.  
RECORDED 30.14 FT.

COMMENTS:

DEPTH	±MM	FRX	PP	ASSAY 10 20 30 40	GAL TON	REC. GAL	LITH.	DESCRIPTION
650			.74					
51	+30		.63					
52			.25					
53			.67					SILTSTONE BUFF WITH NUMEROUS PP'S
54								
55			.10					MARLSTONE, LIGHT GRAY HARD CALCAREOUS
56								
57			.72					
58			.85					
59			.17	50	659.40			
600			.88					
61	+20		.82					SS OIL SATUR 661.82 - 90
62								
63			.42 .66					
64			.00 .24 .98					
65			.19					SANDSTONE LAYERS OIL SATURATED
66			.06					
67			.10 .80					
68								
69			.25					
670								
71	+10		.75					
72								
73			.12					
74								LOW TO MEDIUM GRADE SHALES
75			.33					
76								
77								
78			.40					
79								
680			.13 .89					
681	0		.25					681.74 681.90 Mahogany Marker
82			.64					SANDSTONE LAYER OIL IMPERMEABLE BROWN-GRAY UNFERTILE A CONTINUED BEDDING AT TOP, SOME INTERBEDDED SHALE
83								
84			.73					
85								
86			.20					SANDSTONE LAYER OIL SATURATED
87								
88			.05					HIGHER GRADE SHALE
89			.42 .70 .89		689.90			
90								

HOLE NO: X-6 SHEET 4<sup>B</sup> OF 7 DATE: 16 JAN '75 LOGGED BY: ECENTZLER COLLAR: \_\_\_\_\_ TD: \_\_\_\_\_

[illegible]

**COMMENTS:**



HOLE NO: X-6 SHEET 5 OF 7 DATE: 16 JAN '75 LOGGED BY: E.C. GENTZLER COLLAR: TD:

DEPTH	±MM	FRX	PP	ASSAY 10 20 30 40	GAL TON	REC. RGD	LITH.	DESCRIPTION
700								thin buff 1/2" layer (0.5") 100.2'
701			.81					
702								
703								
704								
705			.38					
706			.37					
707								
708			.27					thin (0.5") irregular layer of 1/2" ff.
709								
710			.09					
711			.22					
712								
713			.96					
714								
715			.80					
716			.48					
717								
718			.80					
719								
720			.04 .13					LOW TO MEDIUM GRADE SHALE WITH A FEW SAND LAYERS, AND LENS. CREAM COLORED TO MEDIUM BROWN WITH SULF MINERALS FOUND IN SANDS.
721			.14					
722			.11					
723								
724								
725			.27					
726								
727								
728								
729								
730			.94					
731			.49					
732								LOW GRADE SHALE BUFF TO LIGHT BROWN
733			.92					
734								
735								
736			.57					
737								
738			.68 .93					
739			.63					
740			.29					
741								
742			.35					
743								
744			.55					743.92 - 744.2 SAND LAYER / OIL SATUR
745			.79					
746								
747								
748			.38					
749			.19					HIGHER GRADE ZONE

COMMENTS:

DANGER CHECKED HIS NUMBERS

CUT 30.22' (0.78) ASSUMED LEFT ON BOTTOM  
7:25 AM, 16 JAN 75 - ECG

THE CLEVELAND CLAY CO. PROJECT: W. MOUTON  
 HOLE NO: X-6 SHEET 6 OF 7 DATE: 1/16/75 LOGGED BY: W. MOUTON COLLAR: TD:

DEPTH	±MM	FRX	PP	ASSAY 10 20 30 40	GAL/ TON	REC. ERRD	LITH.	DESCRIPTION
750			56	750.90				HIGHER GRADE ZONE
51								
52								LOW TO MEDIUM GRADE SHALE
53			02.25.5.78.98					WITH ZONES OF HIGH GRADE
54			22.55.45					LIGHT BROWN TO BLACK -
55			18.54.91					INNER BEDDED SS AND SOME
56								SILTSTONES -
57			03.20.72.98					HIGHER GRADE ZONE INNER BEDDED
58			19.30.77					WITH SAND LAYERS SOME
59			15					DEAD OIL PRESENT
760								
61			100.160					
62			127.50					LOW GRADE SHALE
63			104.30					
64								
65			A3					
66			26.50					
67			A4					
68								
69			17					
770								
71			35					
72								
73			51					
74			73					775.60 - 776.00
75			184					OIL SATURATED SAND LAYER
76								
77								
78			100.95					
79								
780				780.10				
81								
82			78					LOW TO MEDIUM GRADE
83								SHALE SOME OIL SATURATED
84			83					SANDY AREAS PRESENT
85			26.33					LIGHT TO MEDIUM BROWN
86			43.65.97					YARD
87			23					SANDSTONE LAYER OIL SATURATED
88								
89			95					
790								
91			19					
92			118					
93			20.83					
94								
95								
96			151					
97			89					
98								
99			44					

COMMENTS:

PROPERTY OF THE U.S. GOVERNMENT

7-20-68

W. MONTGOMERY

COMMENTS:

2/11/12

Hole No.

X-6

Cellar Elev: 54'12.0

Depth | Flow | Sp. Cond. | Temp. | 4-S | (methane) CH<sub>4</sub>

Comments

~~369~~  
369  
400  
510  
540  
565  
570  
600  
625  
629  
659  
689  
715  
745  
750  
780  
800

?

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—

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—

—

10-12 gpm

1,000

54°

—

—

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—

—

water emanating from air mist spray (injection)

— 191A GSE (4-12)

Slight flow of water—insufficient to measure

TD 805.03