

AGE NO. 2 GOLDEN, COLORADO
PRIVATE AND CONFIDENTIAL

Project Number: 840704

Project Engineer: W. H. Reeve

ANALYTICAL LABORATORY REPORT

Sponsor: Shell Oil Company

Date Submitted: August 6, 1964

Lab. No.	Depth Sample No.	Description	G/T Oil		G/T Water		Specific Gravity		Bulk Density gm/cc											
			Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd
9	1,875	S - 00026		5.36		1.06		0.918				2.53								
10	1,876	S - 00027		2.22		2.49		0.916 *				2.56								
11	1,877	S - 00028		7.92		1.02		0.926				2.51								
12	1,878	S - 00029		8.54		0.60		0.912				2.52								
13	1,879	S - 00030		7.39		22.3		0.936				2.48								
14	1,880	S - 00031		10.7		1.21		0.923				2.49								
15	1,881	S - 00032		7.41		0.67		0.936				2.53								
16	1,882	S - 00033		6.50		0.40		0.901				2.53								
17	1,883	S - 00034		4.70		1.01		0.905				2.45								
18	1,884	S - 00035		7.06		0.95		0.911				2.49								
19	1,885	S - 00036		7.21		0.74		0.904				2.51								
20	1,886	S - 00037		5.46		0.62		0.914				2.55								
21	1,887	S - 00038		6.94		0.44		0.926				2.55								
22	1,888	S - 00039		2.18		2.00		0.916 *				2.57								
23	1,889	S - 00040		12.1		0.39		0.927				2.44								
24	1,890	S - 00041		4.55		1.26		0.922				2.15								
25	1,891	S - 00042		7.42		0.60		0.914				2.55								
26	1,892	S - 00043		7.67		0.20		0.924				2.54								
27	1,893	S - 00044		6.54		0.39		0.921				2.52								
28	1,894	S - 00045		7.39		0.59		0.905				2.50								
29	1,895	S - 00046		6.98		1.39		0.912				2.54								
30	1,896	S - 00047		4.96		0.95		0.918				2.47								
31	1,897	S - 00048		6.93		0.58		0.918				2.49								
32	1,902	S - 00049		5.73		0.39		0.914				2.53								
33	1,903	S - 00050		6.75		0.39		0.917				2.54								

* Specific gravity calculated from average of group.

Date Reported

PAGE NO. 1 GOLDEN, COLORADO
PRIVATE AND CONFIDENTIAL
ANALYTICAL LABORATORY REPORT
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Lab Group Number: _____
Project Number: 840704
Sponsor: Shell Oil Company

Section 36-9S-21E
Project Engineer: W. H. Reeves
Date Submitted: August 7, 1964

Lab. No.	Depth Samp. No.	Description	G/T Oil		G/T Water		Specific Gravity		Bulk Density gm/cc											
			Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd
233	1,913	S - 00060		3.31		0.81		0.914			2.41									
234	1,914	S - 00061		7.84		0.40		0.910			2.49									
235	1,915	S - 00062		5.36		0.60		0.902			2.47									
236	1,916	S - 00063		6.79		0.43		0.894			2.51									
237	1,917	S - 00064		6.72		0.45		0.933			2.50									
238	1,918	S - 00065		21.2		1.09		0.908			1.95									
239	1,919	S - 00066		9.26		0.42		0.880			2.52									
240	1,920	S - 00067		9.81		0.20		0.921			2.50									
241	1,921	S - 00068		8.36		9.14		0.930			2.54									
242	1,922	S - 00069		9.60		0.40		0.925			2.53									
243	1,923	S - 00070		9.15		0.41		0.926			2.52									
244	1,924	S - 00071		7.11		0.60		0.900			2.53									
245	1,925	S - 00072		8.70		0.41		0.919			2.49									
246	1,926	S - 00073		12.6		1.03		0.912			2.41									
247	1,927	S - 00074		10.2		0.39		0.913			2.48									
248	1,928	S - 00075		12.0		6.12		0.933			2.46									
249	1,929	S - 00076		5.53		3.70		0.917			2.52									
250	1,930	S - 00077		12.3		0.40		0.923			2.45									
251	1,931	S - 00078		4.44		1.03		0.926			2.51									
252	1,932	S - 00079		7.00		0.61		0.897			2.51									
253	1,933	S - 00080		3.95		1.00		0.914			2.50									
254	1,934	S - 00081		3.74		1.71		0.914			2.48									
255	1,935	S - 00082		2.51		3.13		0.915			2.51									
256	1,936	S - 00083		7.52		0.39		0.914			2.54									
257	1,937	S - 00084		8.52		0.58		0.913			2.54									

Small particles of tar
Some Dawsonite Nephelite

rka

visor

Date Reported

August 11, 1964

Date Submitted: August 7, 1964

Sponsor:

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Lab. No.	Depth Sample No. Ft.	Description	G/T Oil		G/T Water		Specific Gravity		Bulk Density gm/cc											
			Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd
388	1,949	S - 00096		11.4		0.57		0.910			2.47									
389	1,950	S - 00097		8.89		0.20		0.941			2.51									
390	1,951	S - 00098		8.13		0.20		0.920			2.52									
391	1,952	S - 00099		6.59		0.58		0.910			2.51									
392	1,953	S - 00100		5.38		0.98		0.914			2.55									
393	1,954	S - 00101		44.9		2.85		0.902			1.91									
394	1,955	S - 00102		25.4		2.08		0.915			2.17									
395	1,956	S - 00103		7.72		0.87		0.906			2.51									
396	1,962	S - 00104		23.0		1.68		0.915			2.18									
397	1,963	S - 00105		8.52		1.42		0.904			2.48									
398	1,964	S - 00106		6.61		0.97		0.908			2.48									
399	1,965	S - 00107		8.72		1.02		0.933			2.42									
400	1,966	S - 00108		9.09		0.62		0.910			2.48									
401	1,967	S - 00109		25.8		1.78		0.903			2.16									
402	1,968	S - 00110		11.3		0.92		0.920			2.43									
403	1,969	S - 00111		8.62		1.12		0.910			2.47									
404	1,970	S - 00112		9.35		0.58		0.918			2.44									
405	1,971	S - 00113		5.73		0.38		0.909			2.44									
406	1,972	S - 00114		10.3		1.16		0.919			2.44									
407	1,973	S - 00115		11.4		0.59		0.910			2.44									
408	1,974	S - 00116		12.0		0.80		0.903			2.43									
409	1,975	S - 00117		13.2		1.29		0.898			2.39									
410	1,976	S - 00118		16.9		1.40		0.899			2.32									
411	1,977	S - 00119		10.9		1.24		0.908			2.42									
412	1,978	S - 00120		12.5		1.58		0.914			2.38									

Calcareous Porosity Bleeding Oil

PRIVATE AND CONFIDENTIAL
ANALYTICAL LABORATORY REPORT

Sponsor: Shell Oil Company

Date Submitted: August 11, 1964

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Lab. No.	Depth Samp. No.	Description	G/T Oil		G/T Water		Specific Gravity		Bulk Density gm/cc											
			Est	Fnd	Est	Fnd	Est	Fnd												
413	1,979	S - 00121		13.0		0.82		0.909			2.41									
414	1,980	S - 00122		11.9		1.58		0.908			2.42									
415	1,981	S - 00123		8.59		0.79		0.917			2.45									
416	1,982	S - 00124		9.28		1.55		0.921			2.46									
417	1,983	S - 00125		13.8		0.67		0.905			2.39			Layer	Gilsonite					
418	1,984	S - 00126		11.4		1.07		0.900			2.42									
419	1,985	S - 00127		13.6		1.38		0.912			2.38									
420	1,986	S - 00128		9.70		3.20		0.907			2.38									
421	1,987	S - 00129		8.31		1.05		0.911			2.38									
422	1,988	S - 00130		14.7		1.38		0.901			2.39									
423	1,989	S - 00131		8.91		1.92		0.907			2.44									
424	1,990	S - 00132		13.8		1.17		0.907			2.38									
425	1,991	S - 00133		12.9		1.20		0.901			2.43									
426	1,992	S - 00134		12.6		1.48		0.894			2.40									
427	1,993	S - 00135		12.8		0.63		0.912			2.40									
428	1,994	S - 00136		17.6		4.68		0.906			2.31									
429	1,995	S - 00137		6.76		2.16		0.930			2.40									
430	1,996	S - 00138		13.5		0.63		0.899			2.41									
431	1,997	S - 00139		33.2		1.52		0.898			2.04									
432	1,998	S - 00140		24.1		1.81		0.902			2.18			Layer	Gilsonite					
433	1,999	S - 00141		20.5		1.03		0.907			2.23			Layer	Gilsonite					

GOLDEN, COLORADO

Lab Group Number: 201-04

Section 36-9S-21E

Project Number: 840704

Project Engineer: W. H. Reev

ANALYTICAL LABORATORY REPORT

Sponsor: Shell Oil Company

Date Submitted: August 13, 1964

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PRIVATE AND CONFIDENTIAL

Lab. No.	Depth Sample Ft	Description	G/T Oil		G/T Water		Specific Gravity		Bulk Density		gm/cc									
			Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd
581	2,000	S - 142		30.5		1.63		0.906			2.11									
582	2,001	S - 143		16.1		1.51		0.908			2.34									
583	2,002	S - 144		13.3		1.50		0.908			2.39									
584	2,003	S - 145		12.6		1.08		0.908			2.44									
585	2,004	S - 146		9.17		0.68		0.909			2.46									
586	2,005	S - 147		4.55		0.45		0.880			2.34									
587	2,006	S - 148		11.5		0.87		0.908			2.43									
588	2,007	S - 149		11.7		1.15		0.906			2.43									
589	2,008	S - 150		8.71		1.07		0.911			2.52									
590	2,009	S - 151		2.90		3.05		0.904 *			2.53									
591	2,010	S - 152		14.2		0.87		0.908			2.37									
592	2,011	S - 153		21.7		1.72		0.902			2.23									
593	2,012	S - 154		10.4		1.11		0.915			2.44									
594	2,013	S - 155		11.7		1.52		0.911			2.41									
595	2,014	S - 156		5.90		0.66		0.896			2.54									
596	2,015	S - 157		6.02		0.93		0.924			2.56									
597	2,016	S - 158		15.1		1.46		0.908			2.37									
598	2,017	S - 159		12.6		1.29		0.903			2.42									
599	2,018	S - 160		4.56		0.65		0.900			2.53									
600	2,019	S - 161		6.46		1.77		0.889			2.49									
601	2,020	S - 162		5.22		1.73		0.913			2.54									
602	2,021	S - 163		9.17		1.75		0.882			2.47									

* Specific gravity calculated from average of group.

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visor

Date Reported

August 14, 1964

GOLDEN, COLORADO

Lab Group Number: 202-04

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Section 36-9S-21 E

Project Number: 840704

Project Engineer: W. H. Reeves

ANALYTICAL LABORATORY REPORT

Sponsor: Shell Oil Company

Date Submitted: August 13, 1964

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~~PRIVATE AND CONFIDENTIAL~~

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* Specific gravity calculated from average of group.

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Date Reported

August 17, 1964

ANALYTICAL LABORATORY REPORT
648- PRIVATE AND CONFIDENTIAL

Sponsor: Shell Oil Company

Date Submitted: August 14, 1964

Lab. No.	Depth-Ft. Samp. No.	Description	G/T Oil		G/T Water		Specific Gravity				Bulk Density gm/cc									
			Est	Fnd	Est	Fnd	Est	Fnd			Est	Fnd								
724	2049	S - 191		11.9		0.23		0.918			2.42									
725	2050	S - 192		9.60		0.72		0.921			2.44									
726	2051	S - 193		6.86		1.10		0.927			2.50									
727	2052	S - 194		7.74		0.44		0.911			2.48									
728	2053	S - 195		6.63		0.44		0.897			2.49									
729	2054	S - 196		4.82		0.88		0.912 *			2.51									
730	2055	S - 197		10.8		0.67		0.917			2.44									
731	2056	S - 198		17.3		1.14		0.908			2.31									
732	2057	S - 199		11.6		0.66		0.919			2.40									
733	2058	S - 200		10.5		0.66		0.917			2.45									
734	2059	S - 201		9.27		0.45		0.901			2.46									
735	2060	S - 202		13.3		1.13		0.919			2.31	Two samples with same depth 2060								
736	2060	S - 203		12.1		1.09		0.903			2.39	Two samples with same depth 2060								
737	2061	S - 204		27.8		1.31		0.906			2.12									
738	2062	S - 205		32.0		0.66		0.907			2.04	Sticky tar section appears to have porosity								
739	2063	S - 206		8.92		0.70		0.913			2.46									
740	2064	S - 207		10.3		0.72		0.934			2.44									
741	2065	S - 208		8.31		0.47		0.898			2.42									
742	2066	S - 209		2.48		0.68		0.914 *			2.44									
743	2067	S - 210		5.21		0.43		0.918			2.52									
744	2068	S - 211		47.9		1.93		0.907			1.86	Black								
745	2069	S - 212		17.2		0.66		0.903			2.31	Black								
746	2070	S - 213		8.99		0.46		0.911			2.45									
747	2071	S - 214		2.41		0.22		0.914			2.46									
748	2072	S - 215		9.47		0.89		0.917			2.41									

* Specific gravity calculated from average of group.

visor

Date Reported

August 17, 1964

Project Number:

Project Engineer:

W. H. Reeves

Sponsor:

Date Submitted:

August 14, 1964

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PRIVATE AND CONFIDENTIAL

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Date Reported

August 17, 1964

GOLDEN, COLORADO

Project Number: 840704

Section 36-9S-21E

Project Engineer: W. H. Reeves

ANALYTICAL LABORATORY REPORT
648- PRIVATE AND CONFIDENTIAL

Sponsor: Shell Oil Company

Date Submitted: August 17, 1964

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Date Reported

August 19, 1964

ANALYTICAL LABORATORY REPORT
648- PRIVATE AND CONFIDENTIAL

Lab. No.	Depth-Ft. Sample No.	Description	G/T Oil		G/T Water		Specific Gravity		Bulk Density gm/cc											
			Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd
347	2091	S - 234		9.09		1.62		0.916			2.44									
348	2092	S - 235		14.7		0.68		0.894			2.34									
349	2093	S - 236		10.8		1.30		0.933			2.47									
350	2094	S - 237		12.5		0.22		0.920			2.43									
351	2095	S - 238		14.4		0.65		0.918			2.38									
352	2096	S - 239		7.76		0.72		0.923			2.46									
353	2097	S - 240		9.95		0.65		0.918			2.47									
354	2098	S - 241		9.29		0.45		0.911			2.50									
355	2099	S - 242		16.6		0.65		0.902			2.34									
356	2100	S - 243		14.4		0.65		0.915			2.37									
357	2101	S - 244		10.2		0.45		0.923			2.48									
358	2102	S - 245		11.3		0.64		0.915			2.46									
359	2103	S - 246		10.1		0.66		0.910			2.49									
360	2104	S - 247		7.90		0.65		0.912			2.52									
361	2105	S - 248		9.13		0.66		0.918			2.51									
362	2106	S - 249		21.7		2.20		0.915			2.28		Black							
363	2107	S - 250		14.4		0.69		0.930			2.30									
364	2108	S - 251		18.1		0.94		0.916			2.33									
365	2109	S - 252		10.9		0.72		0.920			2.46									
366	2110	S - 253		10.8		0.91		0.929			2.48									
367	2111	S - 254		12.1		0.87		0.918			2.44									
368	2112	S - 255		8.55		0.67		0.915			2.53									
369	2113	S - 256		24.4		1.37		0.910			2.22									
370	2114	S - 257		12.8		0.51		0.904			2.35		Calcareous							
371	2115	S - 258		15.6		1.12		0.902			2.26		Very hard,	calcareous						

ANALYTICAL LABORATORY REPORT
648- PRIVATE AND CONFIDENTIAL

848- PRIVATE AND CONFIDENTIAL

Lab. No.	Depth-Ft. 1150-1150A Max	Description	G/T Oil		G/T Water		Specific Gravity		Bulk Density gm/cc											
			Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd
872	2116	S - 259		16.7		0.65		0.900			2.26	Very hard, calcareous								
873	2117	S - 260		12.2		0.44		0.914			2.44									
874	2118	S - 261		HELD FOR RECHECK						2.44										
875	2119	S - 262		12.8		0.44		0.907			2.43									
876	2122- 2150A	S - 263		6.42		0.22		0.912			2.41									
877	" B	S - 264		12.6		1.03		0.899			2.33									
878	" C	S - 265		9.44		0.45		0.915			2.36									
879	" D	S - 266		16.7		0.65		0.919			2.30									
880	" E	S - 267		4.02		0.49		0.909 *			2.42									
881	" F	S - 268		7.39		0.66		0.916			2.37									
882	" G	S - 269		13.1		0.90		0.908			2.34									
883	" H	S - 270		17.4		0.65		0.903			2.33									
884	" I	S - 271		25.3		1.22		0.910			2.18									
885	" J	S - 272		21.4		1.22		0.923			2.23									
886	" K	S - 273		16.9		0.65		0.910			2.33									
887	" L	S - 274		13.2		0.44		0.918			2.38									
888	" M	S - 275		12.3		1.79		0.907			2.34									
889	" N	S - 276		16.0		0.89		0.903			2.34									
890	" O	S - 277		18.4		0.68		0.910			2.32									
891	" P	S - 278		10.6		0.64		0.913			2.41									
892	" Q	S - 279		14.3		0.46		0.910			2.42									
893	" R	S - 280		9.72		0.43		0.910			2.45									
894	" S	S - 281		13.7		0.46		0.918			2.39									
895	" T	S - 282		9.80		0.22		0.921			2.47									
896	" U	S - 283		10.7		3.51		0.905			2.46									

* Specific gravity calculated from average of group.

ANALYTICAL LABORATORY REPORT
648- PRIVATE AND CONFIDENTIAL

Sponsor: Shell Oil Company

Date Submitted: August 18, 1964

Lab. No.	Depth-Ft. Sample No.	Description	G/T Oil		G/T Water		Specific Gravity		Bulk Density gm/cc											
			Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd
897	2122- 2150V	S - 284		16.4		0.22		0.915			2.33									
898	" W	S - 285		12.2		0.22		0.919			2.44									
899	" X	S - 286		9.90		0.22		0.929			2.45									
900	" Y	S - 287		9.88		0.50		0.881			2.41									
901	" Z	S - 288		13.2		0.44		0.912			2.40									
902	" AA	S - 289		11.4		1.76		0.907			2.35									
903	" BB	S - 290		7.14		0.71		0.930			2.38									
904	2149	S - 291		9.80		1.77		0.951			2.37									
905	2150	S - 292		12.4		0.22		0.906			2.32									
906	2151	S - 293		6.33		3.37		0.912 *			2.33									
907	2152	S - 294		6.48		3.56		0.894			2.37									
908	2153	S - 295		8.44		3.92		0.928			2.33									
909	2154	S - 296		5.87		4.02		0.912 *			2.34									
910	2155	S - 297		4.39		3.54		0.912 *			2.32									
911	2156	S - 298		14.0		1.32		0.910			2.32									
912	2157	S - 299		26.1		1.29		0.904			2.17									
913	2158	S - 300		17.1		1.36		0.905			2.28									
914	2159	S - 301		14.5		0.22		0.910			2.39									
915	2160	S - 302		14.5		1.39		0.909			2.36									
916	2161	S - 303		18.9		1.67		0.906			2.26									
917	2162	S - 304		29.3		1.20		0.899			2.13									
918	2163	S - 305		43.8		2.10		0.904			1.84									
919	2164	S - 306		17.9		0.62		0.904			2.21									
920	2165	S - 307		6.96		0.43		0.898			2.46									
921	2166	S - 308		6.38		0.43		0.882			2.45									

* Specific gravity calculated from average of group.

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Date Reported

August 19, 1964

ANALYTICAL LABORATORY REPORT
648- PRIVATE AND CONFIDENTIAL

Sponsor: Shell Oil Company

Date Submitted: August 18, 1964

Lab. No.	Depth-Ft. Sample No.	Description	G/T Oil		G/T Water		Specific Gravity		Bulk Density gm/cc											
			Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd
922	2167	S - 309		6.46		0.21		0.894				2.43								
923	2168	S - 310		9.78		0.44		0.894				2.40								
924	2169	S - 311		7.17		0.22		0.892				2.37	Burned.	Chipped 1/8"	layer off	sample.				
925	2170	S - 312		9.58		0.47		0.913				2.36	Burned.	Chipped 1/8"	layer off	sample.				
926	2171	S - 313		4.51		0.22		0.889				2.49	Burned.	Chipped 1/8"	layer off	sample.				
927	2172	S - 314		Trace		0.0		---				2.50	Burned.	Chipped 1/4"	layer off	sample.				
928	2173	S - 315		0.78		0.24		0.901 *				2.44	Burned.	Light gray						
929	2174	S - 316		0.27		0.50		0.901 *				2.48	Burned.	Light gray						
930	2175	S - 317		0.53		0.24		0.901 *				2.48	Burned.	Light gray						
931	2176	S - 318		Trace		0.23		---				2.44	Burned.	Light gray						
932	2177	S - 319		Trace		0.50		---				2.53	Burned.	Light gray						
933	2178	S - 320		0.27		0.49		0.901 *				2.43	Burned.	Light gray						
934	2179	S - 321		9.23		0.42		0.920				2.32	Burned.	Light gray						
935	2180	S - 322		6.22		0.43		0.904				2.40	Burned.	Light gray						
936	2185	S - 323		24.3		0.65		0.898				2.20								
937	2186	S - 324		63.3		2.24		0.876				1.74	Black							
938	2187	S - 325		59.7		2.03		0.894				1.74	Black							
939	2188	S - 326		28.6		0.87		0.883				2.15								
940	2189	S - 327		23.6		0.86		0.896				2.23								
941	2190	S - 328		19.8		0.88		0.899				2.29								
942	2191	S - 329		15.2		0.44		0.901				2.40								
943	2192	S - 330		10.7		0.44		0.908				2.41								
944	2193	S - 331		30.6		0.67		0.908				2.16								
945	2194	S - 332		14.8		0.68		0.901				2.40								
946	2195	S - 333		11.3		0.66		0.917				2.43								

* Specific gravity calculated from average of group.

August 19, 1964

ANALYTICAL LABORATORY REPORT
648- PRIVATE AND CONFIDENTIAL

Sponsor: Shell Oil Company

Date Submitted: August 18, 1964

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Date Reported

August 19, 1964

ANALYTICAL LABORATORY REPORT
48- PRIVATE AND CONFIDENTIAL

Sponsor: Shell Oil Company

Date Submitted: August 20, 1964

Lab. No.	Depth-Ft. Sample No.	Description	G/T Oil		G/T Water		Specific Gravity		Bulk Density gm/cc											
			Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd
006	2200	S - 338		9.93		0.23		0.891			2.44									
007	2201	S - 339		31.5		0.44		0.899			2.11		Dark							
008	2202	S - 340		40.2		1.62		0.910			1.98		Black							
009	2203	S - 341		19.5		0.68		0.890			2.28									
010	2204	S - 342		16.5		0.45		0.901			2.35									
011	2205	S - 343		28.9		0.68		0.886			2.16									
012	2206	S - 344		45.3		1.64		0.897			1.94		Gilsonite							
013	2207	S - 345		58.2		1.02		0.900			1.74									
014	2208	S - 346		82.1		1.92		0.885			1.53		Rich							
015	2209	S - 347		38.5		1.63		0.886			1.99		Rich							
016	2210	S - 348		86.3		1.97		0.889			1.53		Rich							
017	2211	S - 349		77.4		1.89		0.889			1.58		Rich, mica layers							
018	2213	S - 350		38.1		1.82		0.897			2.13		Rich							
019	2214	S - 351		40.4		1.33		0.886			1.83		Black							
020	2215	S - 352		22.6		1.37		0.916			2.23		Rich							
021	2216	S - 353		23.0		0.67		0.904			2.25		Black							
022	2217	S - 354		60.3		0.73		0.909			1.76		Black							
023	2218	S - 355		16.0		0.72		0.910			2.28									
024	2219	S - 356		18.3		0.69		0.906			2.26									
025	2220	S - 357		57.7		0.66		0.895			1.78		Rich							
026	2221	S - 358		40.8		0.64		0.888			1.96		Rich							
027	2222	S - 359		33.0		0.43		0.887			2.05		Rich							
028	2223	S - 360		35.2		3.26		0.909			1.87		Black							
029	2224	S - 361		21.0		0.74		0.880			2.19									
030	2225	S - 362		48.0		0.64		0.899			1.89									

W. H. Reeves

Date Reported

August 21, 1964

ANALYTICAL LABORATORY REPORT
48- PRIVATE AND CONFIDENTIAL

Sponsor: Shell Oil Company

Date Submitted: August 20, 1964

Lab. No.	Depth-Ft. Sample No.	Description	G/T Oil		G/T Water		Specific Gravity		Bulk Density gm/cc											
			Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd
031	2226	S - 363		16.7		1.51		0.904			2.28									
032	2227	S - 364		11.6		0.44		0.895			2.44									
033	2228	S - 365		58.8		1.61		0.910			1.74	Black								
034	2229	S - 366		17.3		0.77		0.893			2.32									
035	2230	S - 367		14.6		0.22		0.890			2.32									
036	2231	S - 368		19.7		0.65		0.889			2.31									
037	2232	S - 369		37.8		0.68		0.878			2.04									
038	2233	S - 370		41.8		0.91		0.893			1.99									
039	2234	S - 371		33.8		0.87		0.885			2.11									
040	2235	S - 372		26.5		1.01		0.901			2.19									
041	2236	S - 373		33.3		0.64		0.905			2.11									
042	2237	S - 374		40.8		0.66		0.882			1.98									
043	2238	S - 375		27.9		0.97		0.887			2.19									
044	2239	S - 376		18.2		0.67		0.902			2.35									
045	2240	S - 377		14.7		0.64		0.906			2.39									
046	2241	S - 378		13.2		1.58		0.918			2.32									
047	2242	S - 379		9.93		0.67		0.897			2.36									
048	2243	S - 380		39.8		1.63		0.910			2.00									
049	2244	S - 381		15.8		0.94		0.911			2.36									
050	2245	S - 382		8.22		0.44		0.912			2.39									
051	2246	S - 383		11.3		0.45		0.903			2.40									
052	2247	S - 384		10.3		0.43		0.908			2.44									
053	2248	S - 385		1.81		2.82		0.910 *			2.54									
054	2249	S - 386		4.01		0.46		0.910 *			2.57									
055	2250	S - 387		7.80		1.73		0.913			2.51									

* Specific gravity calculated from average of group.

ANALYTICAL LABORATORY REPORT

Sponsor: Shell Oil Company

Date Submitted: August 20, 1964

48- PRIVATE AND CONFIDENTIAL

Lab. No.	Depth-Ft. Sample No.	Description	G/T Oil		G/T Water		Specific Gravity		Bulk Density gm/cc											
			Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd
056	2251	S - 388		28.4		0.45		0.922				2.16	Black							
057	2252	S - 389		NO RESULTS								2.48								
058	2253	S - 390		6.40		1.52		0.949				2.49								
059	2254	S - 391		6.45		0.66		0.893				2.51								
060	2255	S - 392		13.1		0.68		0.905				2.42								
061	2256	S - 393		43.2		1.08		0.908				1.92	Black							
062	2257	S - 394		13.0		1.09		0.893				2.43	Dolomite							
063	2258	S - 395		4.30		1.10		0.923				2.51	Dolomite							
064	2259	S - 396		2.94		0.22		0.910 *				2.65	Limestone							
065	2260	S - 397		2.51		0.51		0.910 *				2.67	Dolomite							
066	2261	S - 398		0.75		1.82		0.910 *				2.64	Dolomite							
067	2262	S - 399		0.75		1.60		0.910 *				2.70	Limestone							
068	2263	S - 400		12.6		1.13		0.914				2.42	Dolomite							
069	2264	S - 401		10.5		1.97		0.915				2.46								
070	2265	S - 402		31.2		1.40		0.897				2.08	Dark							
071	2266	S - 403		36.4		1.17		0.901				2.02	Black							
072	2267	S - 404		5.59		0.24		0.883				2.49	Dolomite							
073	2268	S - 405		11.8		1.72		0.914				2.41	Dolomite							
074	2269	S - 406		9.36		1.16		0.921				2.49	Dolomite							
075	2270	S - 407		6.71		0.46		0.926				2.50	Dolomite							
076	2271	S - 408		5.19		0.44		0.899				2.53	Dolomite							
077	2272	S - 409		0.51		1.16		0.912 *				2.50	Dolomite							
078	2273	S - 410		0.0		0.45		---				2.56	Dolomite							
079	2274	S - 411		1.87		0.43		0.912 *				2.50	Dolomite							
080	2275	S - 412		3.92		0.45		0.912 *				2.44	Dolomite							

* Specific gravity calculated from average of group.

ANALYTICAL LABORATORY REPORT

Sponsor: Shell Oil Company

Date Submitted: August 20, 1964

548- PRIVATE AND CONFIDENTIAL

Lab. No.	Depth-Ft. Sample No.	Description	G/T Oil		G/T Water		Specific Gravity		Bulk Density gm/cc		Est		Fnd		Est		Fnd		Est		Fnd	
			Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd
081	2276	S - 413		5.19		0.46		0.919					2.53	Dolomite								
082	2277	S - 414		1.45		0.22		0.912 *					2.49	Dolomite								
083	2278	S - 415		3.08		0.43		0.912 *					2.46	Dolomite								
084	2279	S - 416		1.47		0.67		0.912 *					2.57	Dolomite								
085	2280	S - 417		2.06		1.17		0.912 *					2.63									
086	2281	S - 418		2.77		0.23		0.912 *					2.39	Dolomite								
087	2282	S - 419		2.39		0.48		0.912 *					2.50	Dolomite								
088	2283	S - 420		3.64		0.44		0.912 *					2.51									
089	2284	S - 421		5.89		2.61		0.922					2.52									
090	2285	S - 422		8.71		2.95		0.921					2.49									
091	2286	S - 423		5.22		2.02		0.903					2.54									
092	2287	S - 424		2.91		1.77		0.912 *					2.57									
093	2288	S - 425		0.97		0.89		0.912 *					2.49									
094	2289	S - 426		1.75		6.83		0.910 *					2.55									
095	2290	S - 427		3.57		3.46		0.910 *					2.54									
096	2291	S - 428		2.23		6.30		0.910 *					2.49									
097	2292	S - 429		1.63		7.83		0.910 *					2.47									
098	2293	S - 430		3.71		5.69		0.910 *					2.49									
099	2294	S - 431		2.90		0.22		0.910 *					2.34									
100	2295	S - 432		0.0		6.41		---					2.42									
101	2296	S - 433		1.01		1.84		0.910 *					2.46									
102	2297	S - 434		1.20		2.85		0.910 *					2.48									
103	2298	S - 435		0.56		11.4		0.910 *					2.43									
104	2299	S - 436		0.46		2.54		0.910 *					2.46									
105	2300	S - 437		0.47		9.63		0.910 *					2.42									

* Specific gravity calculated from average of group.

August 21, 1964

ANALYTICAL LABORATORY REPORT
PRIVATE AND CONFIDENTIAL

Sponsor: Shell Oil Company

Date Submitted: August 20, 1964

Lab. No.	Depth-Ft. Sample No.	Description	G/T Oil		G/T Water		Specific Gravity		Bulk Density gm/cc											
			Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd
106	2301	S - 438		0.0		0.0		---			2.43									
107	2302	S - 439		0.96		7.61		0.910 *			2.41									
108	2303	S - 440		2.22		8.96		0.910 *			2.39									
109	2304	S - 441		0.95		7.58		0.910 *			2.40									
110	2305	S - 442		3.67		11.1		0.910 *			2.02	Dark								
111	2306	S - 443		0.51		8.29		0.910 *			2.46									
112	2307	S - 444		0.71		9.70		0.910 *			2.39									
113	2308	S - 445		0.49		6.65		0.910 *			2.41									
114	2309	S - 446		0.0		2.02		---			2.41									
115	2311	S - 447		3.27		2.02		0.910 *			2.45									
116	2312	S - 448		0.0		4.60		---			2.48									
117	2313	S - 449		6.46		1.68		0.910			2.51									
118	2314	S - 450		0.0		1.09		0.910 *			2.38									
119	2315	S - 451		0.54		0.74		0.910 *			2.41	Sandstone, Carbonaceous								
120	2316	S - 452		0.47		1.51		0.910 *			2.39	Sandstone, Carbonaceous								
121	2317	S - 453		1.03		0.47		0.910 *			2.37	Sandstone, Carbonaceous								
122	2318	S - 454		0.79		0.0		0.910 *			2.18	Sandstone, Carbonaceous								
123	2319	S - 455		2.17		0.44		0.910 *			2.36									
124	2320	S - 456		1.66		0.64		0.910 *			2.39									
125	2321	S - 457		0.23		1.49		0.910 *			2.30									
126	2322	S - 458		0.75		0.46		0.910 *			2.41									
127	2323	S - 459		0.51		0.47		0.910 *			2.26									
128	2324	S - 460		1.32		0.24		0.910 *			2.38									
129	2325	S - 461		0.24		1.55		0.910 *			2.50									
130	2326	S - 462		0.49		1.34		0.910 *			2.51									

* Specific gravity calculated from average of group.

August 21, 1964

COLORADO SCHOOL OF MINES RESEARCH FOUNDATION

AGE NO. 6 GOLDEN, COLORADO

Lab Group Number: 288-64

Project Number: 840704

State 14-36, Uintah County, Utah
Section 36-9S-21E

Project Engineer: W. H. Reeves

ANALYTICAL LABORATORY REPORT
648- PRIVATE AND CONFIDENTIAL

Sponsor: Shell Oil Company

Date Submitted: August 20, 1964

Lab. No.	Depth-Ft. Sample No.	Description	G/T Oil		G/T Water		Specific Gravity		Bulk Density gm/cc											
			Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd
131	2327	S - 463		0.51		1.39		0.910	*			2.48								
132	2328	S - 464		0.70		0.85		0.910	*			2.52								
133	2329	S - 465		0.48		1.10		0.910	*			2.34								
134	2330	S - 466		0.24		2.83		0.910	*			2.55								
135	2331	S - 467		0.98		1.77		0.910	*			2.54								
136	2332	S - 468		0.24		2.44		0.910	*			2.52								
137	2333	S - 469		0.98		1.55		0.910	*			2.51								
138	2334	S - 470		0.0		0.66		---				2.49								
139	2335	S - 471		0.55		1.74		0.910	*			2.47								
140	2336	S - 472		0.27		2.92		0.910	*			2.45								
141	2337	S - 473		3.43		1.11		0.910	*			2.49								
142	2338	S - 474		0.24		3.26		0.910	*			2.48								
143	2339	S - 475		0.48		2.41		0.910	*			2.44								
144	2340	S - 476		0.52		1.88		0.910	*			2.47								
145	2341	S - 477		1.06		2.40		0.910	*			2.50								
146	2342	S - 478		0.26		2.10		0.910	*			2.52								
147	2343	S - 479		0.0		2.79		---				2.54								
148	2344	S - 480		1.75		0.68		0.910	*			2.57								
149	2345	S - 481		1.28		2.32		0.910	*			2.54								
150	2346	S - 482		1.45		2.19		0.910	*			2.59								
151	2347	S - 483		2.02		1.60		0.910	*			2.65								
152	2348	S - 484		2.80		1.85		0.910	*			2.62								
153	2349	S - 485		1.95		1.99		0.910	*			2.60								
154	2350	S - 486		1.49		2.94		0.910	*			2.55								
155	2351	S - 487		1.11		3.54		0.910	*			2.54								

* Specific gravity calculated from average of group.

August 21, 1964

GOLDEN, COLORADO

Lab Group Number: 289-64

Project Number: 840704

State 14-36, Uintah County, Utah
Section 36-9S-21E

Project Engineer: W. H. Reeves

ANALYTICAL LABORATORY REPORT

Sponsor: Shell Oil Company

Date Submitted: August 20, 1964

548- PRIVATE AND CONFIDENTIAL

[illegible]

* Specific gravity calculated from average of group.

August 24, 1964

ANALYTICAL LABORATORY REPORT
48- PRIVATE AND CONFIDENTIAL

Sponsor: Shell Oil Company

Date Submitted: August 24, 1964

Lab. No.	Depth-Ft. Sample No.	Description	G/T Oil		G/T Water		Specific Gravity		Bulk Density gm/cc											
			Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd
234	2370	S - 506		5.07		2.00		0.878				2.55								
235	2371	S - 507		0.99		0.67		0.900	*			2.52								
236	2372	S - 508		1.71		1.04		0.900	*			2.60								
237	2373	S - 509		4.14		0.66		0.900	*			2.62								
238	2375	S - 511		10.3		2.00		0.907				2.44								
239	2376	S - 512		8.60		1.72		0.915				2.47								
240	2379	S - 515		7.48		0.65		0.897				2.54								
241	2380	S - 516		7.19		0.66		0.891				2.56								
242	2384	S - 520		8.03		0.91		0.907				2.47								
243	2390	S - 526		18.0		1.99		0.906				2.25								
244	2391	S - 527		26.5		1.71		0.902				2.20								
245	2392	S - 528		16.1		0.86		0.895				2.38								
246	2393	S - 529		18.5		2.85		0.911				2.19								
247	2394	S - 530		19.9		1.80		0.913				2.27								
248	2395	S - 531		3.14		2.83		0.905	*			2.57								
249	2396	S - 532		6.44		1.51		0.907				2.52								
250	2397	S - 533		4.55		0.90		0.888				2.43								
251	2398	S - 534		5.06		0.65		0.907				2.42								
252	2411	S - 535		6.33		0.66		0.902				2.41								
253	2412	S - 536		3.25		0.44		0.892				2.26								
254	2413	S - 537		5.60		0.88		0.905	*			2.41								
255	2414	S - 538		14.2		2.38		0.899				2.36								
256	2415	S - 539		52.8		2.77		0.921				1.78	Black							
257	2416	S - 540		12.2		4.32		0.902				2.37								
258	2417	S - 541		12.2		2.76		0.908				2.40								

* Specific gravity calculated from average of group.

PAGE NO. 2 GOLDEN, COLORADO

Lab Group Number: 22104

State 14-50, Uintah County, Utah

Section 36-9S-21E

Project Engineer: W. H. Reeves

Project Number: 840704

Sponsor: Shell Oil Company

Date Submitted: August 24, 1964

548- ANALYTICAL LABORATORY REPORT
PRIVATE AND CONFIDENTIAL

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* Specific gravity calculated from average of group.

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Date Reported

August 25, 1964