EXPLORATORY AND DEVELOPMENT WELLS
drilled in
Green River Basin, Wyoming
Ts. 12-26 N., Rs. 107-114 W.
(As on record in Wyoming Geological Survey files, November 18, 1959)

T. 23 N., R. 107 W.
J. R. McDermott #1 Patrick S. McDermott, C Sec. 13, T.D. 815', (Trona core hole #5)

T. 13 N., R. 108 W.
Falcon Co., #1 Government, C NW¼ SE¼ Sec. 10, T.D. 5750' (Samples at UW: 480' - 5750')

T. 25 N., R. 108 W.
Great Western Drilling - Empire Drlg., #1 Ray, C SE¼ NE¼ Sec. 18, T.D. 9246' (Samples at UW: 200' - 9246')

Farson O & G Co. #1, C SE¼ NE¼ Sec. 18, T.D. 1822

T. 18 N., R. 109 W.
Potash Co. of America #1 Harris, Sec. 6, T.D. 1824'

Mt. Fuel Supply #1 J. R. Ellis, C SE¼ SE¼ Sec. 8, T.D. ?

Potash Co. of America #1 Anderson, Sec. 12, T.D. 1265'

T. 19 N., R. 109 W.
UPRR #3, 378 S/N 383 W/E Sec. 31, T.D. 1660'

T. 24 N., R. 109 W.
General Petroleum #62A-9 Unit, SE¼ NW¼ NE¼ Sec. 9, T.D. 9275', Green River at surface

T. 25 N., R. 109 W.
General Petroleum #67-28, NE¼ SW¼ SE¼ Sec. 28, T.D. 8205'

T. 14 N., R. 110 W.
The California Co. #1 Unit, C SW¼ NW¼ Sec. 6, T.D. 5922', Top of Green River 320'

T. 18 N., R. 110 W.
Mtn. Fuel Supply Co. #1 ~~S. May~~ J. Hay, Jr., NE¼ SE¼ NW¼ Sec. 2, T. D. 5330'

Union Pacific R. R. #1, 2122 S/N 150 W/E Sec. 3, T. D. 1803'

Union Pacific R. R. #4, 1833 N/S 1350 W/E Sec. 5, T. D. 1784'

Covey Little America #1, SW¼ SW¼ NE¼ Sec. 17, T. D. 1500'

T. 19 N., R. 110 W.
Union Pacific R. R. #2 (1555 N/S 481 W/E), Sec. 15, T. D. 1672'

T. 23 N., R. 110 W.
Mtn. Fuel Supply #1 Unit, C SE¼ SE¼ Sec. 13, T. D. 3047'

Mtn. Fuel Supply #1-A Unit, NW¼ SE¼ SE¼ Sec. 13, T. D. 9560'

T. 25 N., R. 110 W.
The California Co. #1 Gov't., (660 S/N 710 W/E) W½ NE¼ NE¼ Sec. 15, T. D. 10, 854', Green River at surface

Ashmun-Hilliard #3 Monument Butte, NW¼ NE¼ Sec. 24, Drilling below 5600 as of 11/13/59

T. 26 N., R. 110 W.
The California Co. #2 Unit, NW¼ NW¼ Sec. 22, T. D. 8020'

T. 15 N., R. 111 W.
Phillips Petroleum #1 Unit, S½ NE¼ Sec. 28, Drilling at 7325' as of 11/13/59

T. 26 N., R. 111 W.
McCarthy Gas & Oil, Inc. #28-1, NE¼ NE¼ SE¼ Sec. 28, T. D. 4002'

T. 13 N., R. 112 W.
Northern Nat. Gas Producing #1 Gov't., SE¼ SW¼ Sec. 10, T. D. 12, 025', Top of Green River 1780'

The California Company #1 Unit, NW¼ SE¼ NW¼ Sec. 26, T. D. 7576', Top of Green River 648'

T.16 N., R.112 W.

Mtn. Fuel Supply Co. #14 Unit, S½ SW¼ SE¼ Sec. 16, T.D. 13,150', Top of Green River 1527'

Mtn. Fuel Supply Co. #13 Unit, N½ NW¼ NW¼ Sec. 16, T.D. 12,995'

Mtn. Fuel Supply Co. #7 Unit, C SW¼ NW¼ Sec. 17, T.D. 14,646', Top of Green River 1340' (Samples at UW: 7550' - 7990')

Mtn. Fuel Supply Co. #12 Unit, NE¼ NW¼ NW¼ Sec. 19, T.D. 13,141'

Mtn. Fuel Supply Co., #9 Unit, SE¼ NW¼ NE¼ Sec. 20, T.D. 13,062', Top of Green River 1540'

Mtn. Fuel Supply Co. #8 Unit, SE¼ NW¼ NW¼ Sec. 28, T.D. 13,097', Top of Green River 1780'

Mtn. Fuel Supply Co. #15 Unit, SE¼ SE¼ NE¼ Sec. 6, T.D. 13,003', Top of Green River 1400'

Mtn. Fuel Supply Co. #10 Unit, NE¼ SW¼ NE ¼ Sec. 5, T.D. 12,786', Top of Green River 1685'

Mtn. Fuel Supply Co. #5 Unit, C SE¼ SE¼ Sec. 4, T.D. 13,033', Top of Green River 1760'

Mtn. Fuel Supply Co. #1 Unit, NE¼ SW¼ NW¼ Sec. 8, T.D. 12,895', Top of Green River 1170' (Samples at UW: 325' - 12,893')

T.17 N., R.112 W.

Mtn. Fuel Supply Co. #18 Unit, NE¼ SW¼ SW¼ Sec. 14, T.D. 8780', No tops.

Mtn. Fuel Supply Co. #16 Unit, N½ NE¼ SW¼ Sec. 14, T.D. 12,675', Top of Green River 1170'

Mtn. Fuel Supply Co. #17 Unit, SW¼ SE¼ SE¼ Sec. 22, T.D. 12,724', Top of Green River 1220'

Mtn. Fuel Supply Co. #11 Unit, SW¼ NE¼ NW¼ Sec. 34, T.D. 12,730', Top of Green River 1540'

Mtn. Fuel Supply Co. #2 Unit, NE¼ NE¼ NE¼ Sec. 22, T.D. 12,692', Top of Green River 1388' (Samples at UW: 1278' - 12,993')

T.19 N. R.112 W.

Union Oil Co., et al #1 Gov't., C NE¼ NE¼ Sec. 30, T.D. 12,358, Samples at UW: 50' - 12,200')

T. 22 N., R. 112 W.
Carter Oil Co. #1 Unit, S½ NW¼ NW¼ Sec. 34, T. D. 12,366'
(Samples at UW: 6800' - 11,100')

Belfer Nat. Gas. Co. #2 Unit, NE¼ SE¼ Sec. 20, T. D. 11,013'

T. 23 N., R. 112 W.
Belfer Nat. Gas Co. #1 Unit, C SE¼ SE¼ Sec. 21, T. D. 11,786'

T. 25 N., R. 112 W.
Trigood Oil Co. #1 Unit, NW¼ NE¼ Sec. 14, T. D. 8898'

T. 26 N., R. 112 W.
John L. Kemmerer Jr. #4 Unit, C SE¼ SE¼ Sec. 4, T. D. 8699'

Belfer Nat. Gas Co. #1 CP-BNG-Larson-McGinnis, NW¼ SW¼ SE¼ Sec. 7, T. D. 7568'

Belfer Nat. Gas Co. #2 CP-BNG-Larson-McGinnis, NW¼ SE¼ Sec. 18, T. D. 7715'

Standolind Oil and Gas Co. #3 Unit, W½ SW¼ NW¼ Sec. 15, T. D. 4008'

Carter Oil Co. #1 Gov't., NW¼ SE¼ Sec. 26, T. D. 8700'

T. 15 N., R. 113 W.
Mtn. Fuel Supply Co. #1 Unit, NE¼ SE¼ SW¼ Sec. 35, T. D. 13,370'
Top of Green River 1910'

Park City Oil & Gas Co. #1, NW¼ SE¼ NW¼ Sec. 6, T. D. 3090'

T. 16 N., R. 113 W.
Mtn. Fuel Supply Co. #6 Unit, NW¼ SW¼ NW¼ Sec. 13, T. D. 13,378',
Top of Green River 1860'

Mtn. Fuel Supply Co. #3 Unit, SE¼ SW¼ NE¼ Sec. 12, T. D. 13,063',
Top of Green River 1770' (Samples at UW: 100' - 13,060')

T. 22 N., R. 113 W.
Belfer Nat. Gas Co. #2 Unit, (1300 N/S 3629 W/E: Odd Section)
C SW¼ Sec. 1, T. D. 11,060'

T. 23 N., R. 113 W.
Justheim Realty & Wyoming Nat. Gas Co., #1 Justheim, (No. 1 S/N 1320 E/W) S½ N½ NE¼ Sec. 15, T. D. 3250'

T. 24 N., R. 113 W.

Fontenelle Drilling Co. #1 Pomroy, NE¼ SW¼ Sec. 5, T.D. 1575'

El Paso Nat. Gas - Continental Oil #1 Unit, W½ SE¼ NW¼ Sec. 11, T.D. 13,250' (Samples at UW: 1300' - 11,220')

Great Lakes Oil & Chemical #21-21 "C" Unit, C NE¼ Sec. 21, T.D. 6652'

Belfer-Justheim #J-2 Gov't., C NW¼ NW¼ Sec. 28, T.D. 6513'

T. 25 N., R. 113 W.

Ella B. Newland #1 Howard, Sec. 18 (No depths)

T. 22 N., R. 114 W.

Pan American Petroleum Co. #1 Unit, SW¼ NE¼ NE¼ Sec. 28, T.D. 7007'

T. 23 N., R. 114 W.

Stanolind Oil & Gas Co. #1 Unit, SW¼ SE¼ Sec. 35, T.D. 5718'

Pan American Petroleum Co. #2 Unit, E½ NW¼ NW¼ Sec. 11, T.D. 8027'

Pan American Petroleum Co. #3 Unit, S½ NW¼ NW¼ Sec. 15, T.D. 11,800'

T. 24 N., R. 114 W.

Pan American Petroleum Co. #3 Unit, C NE¼ NW¼, lot 7, Sec. 2, T.D. 3447'

Pan American Petroleum Co. #2 Unit, C lot 1, Sec. 11, T.D. 3651'

Pan American Petroleum Co. #1 Unit, NE¼ NE¼ C lot 12, Sec. 3, T.D. 3010'

Belco Petroleum Co. #3 State Creek Unit, NW¼ NW¼ Sec. 25, T.D. 4072'

Chris Volmer #1 Larsen, NW¼ NW¼ NE¼ Sec. 3, (Suspended)

Perry and Sons #1 Sims, C SE¼ NE¼ Sec. 11, T.D. 120'

M. R. Homer #1 Hershler, NW¼ NW¼ Sec. 3, T.D. 2456'

Falcon Well, Wyoming
(Sec. 10, 15N, 108W)

Depth (ft.)	Shortite (%)	Depth (ft.)	Shortite (%)
1460-70	1	2070-80	none
1470-80	1	2080-90	none
1480-90	1	2090-2100	none
1490-1500	1	2100-10	none
1600-10	1	2110-20	none
1610-20	.1	2120-30	none
1620-30	1	2130-40	none
1630-40	1	2140-50	none
1640-50	1	2150-60	none
1650-60	.1	2160-70	none
1660-70	.01	2170-80	none
1670-80	1	2180-90	none
1680-90	.1	2190-2200	none
1690-1700	.1	2200-10	none
1700-10	1	2210-20	none
1710-20	.01	2220-30	none
1720-30	.01	2230-40	none
1730-40	.01	2240-50	none
1740-50	.01	2250-60	none
1750-60	.01	2260-70	none
1760-70	.01	2270-80	none
1770-80	.01	2280-90	.01
1780-90	.01	2290-2300	none
1790-1800	.01	2300-10	none
1800-10	.01	2310-20	none
1810-20	.01	2320-30	none
1820-30	none	2330-40	none
1830-40	.01	2340-50	none
1840-50	.01	2350-60	none
1850-60	.01	2360-70	none
1860-70	.01	2370-80	none
1870-80	none	2380-90	none
1880-90	none	2390-2400	none
1890-1900	none	2400-10	none
1900-10	none	2410-20	none
1910-20	none	2420-30	none
1920-30	.01	2430-40	none
1930-40	.01	2440-50	none
1940-50	none	2450-60	none
1950-60	.01	2460-70	none
1990-2000	.01	2470-80	none
2000-10	.01	2480-90	none
2010-20	.01	2490-2500	none
2020-30	none	2500-10	none
2030-40	.01	2510-20	none
2040-50	.01	2520-30	none
2050-60	.01	2530-40	none
2060-70	.01	2540-50	none

STATE WYOMING

TRONA (SODIUM CARBONATE) (Map No. 23)
(Name of Mineral or Ore)

(1) LOCATION OF DEPOSIT: - NEAREST CITY OR CITIES: -
15 miles west of Green River, Wyoming.

(2) RAILROAD SERVICE: -
Main line Union Pacific traverses deposit

(3) OCCURRENCE:-
Bedded deposit at a depth of 1590-1620 ft. in strata laid down in extinct Green River Lake.

(4) EXTENT OF RESERVES:-
As determined by four holes drilled, of which three were for purposes of prospecting the deposit, there is an established reserve of at least 150,000,000 tons. At present domestic consumption rates of 3,000,000 tons annually there is sufficient reserve in sight for 50 years. Further drilling is now in progress. Two distinct beds of minable thickness are present.

(5) ESTIMATED REFINED PRODUCTS OBTAINABLE:-
A breakdown into finished products difficult as raw material enters into a variety of chemical processes.

(6) CHEMICAL COMPOSITION:-
Average analyses of the material occurring in the main body outlined by core drilling is:

Sodium carbonate	49.29%	Sodium chloride	Trace
Sodium bicarbonate	33.18	Sodium sulphate	Trace
Water	17.07	Potash salts	Trace
Water insoluble (shale)	0.30		99.84%

(7) RECOVERY PROCESS:-
Material can be mined and calcined at which stage it would be ready for entry into the chemical trade.

(8) RECOVERABLE COMMERCIAL PRODUCTS:-
The basic raw material to be produced will be Trona.

(9) USES OF PRODUCTS:-
The 1940 demand for sodium carbonate (soda ash) was 3,157,000 tons. Sodium carbonate is one of the basic chemicals of the chemical industry. Distribution includes glass manufacture 28.5%, caustic soda 24.6%, chemical trade 22.5%, while others include soap manufacture, paper and pulp industry, dye industry, textiles, water softeners, and petroleum refining. Caustic soda is concentrated lye. (NOTE: See Sheet 2)

(10) REMARKS:-

WYOMING

TRONA (SODIUM CARBONATE) (Map No. 23)

NOTE:

The reserve tonnage above quoted only takes into consideration bedded trona as outlined by three core holes. Undoubtedly the area could be considerably expanded. Within the city limits of the town of Green River, which is 15 miles east of the locality in which core drilling was carried out, a small local industry was at one time developed and is presently being renewed which produced approximately five tons daily of sodium carbonate by evaporation of waters from a series of shallow wells.

The Union Pacific has assembled considerable detailed information on the occurrence of sodium carbonate in the Green River Basin, and as a result of a chemical investigation carried out by its co-partner in the core drilling, there is on hand considerable information on the physical and economic possibilities of a chemical industry at Green River. The establishment of this industry contemplates not only the production of basic sodium carbonate but includes the extraction of potash from the leucite rocks near Superior, the beneficiation of phosphates from Southeastern Idaho and the production of certain chromates from ores available in Montana. Should these data be of interest to the investigating committee, they can be forwarded upon request.

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

10 August 1960

Dr. Horace G. Thomas,
State Geologist,
University of Wyoming,
Laramie, Wyoming.

Dear Dr. Thomas:

I am returning under separate cover the drill cuttings of the Falcon No. 1 Well (10-13N-108W) that Dave Love of the U. S. Geological Survey borrowed from the repository of the Wyoming Geological Survey. Love sent the cuttings to Bill Bradley who asked me to examine them for the mineral shortite. I am enclosing a copy of the table recording the results of my examination.

The estimates are necessarily only rough approximations. When as little as one tiny fragment of shortite was identified in the 10-foot section, I recorded it as 0.01% of the sample. I suspect that the shortite found below the first 150 feet was due to contamination from above.

Thanks for your kindness in letting us examine the cuttings.

Very truly yours,

Jos. J. Fahey

Joseph J. Fahey
Geochemist