

MAR 19690059: SENEX CREEK

Received date: Dec 31, 1969

Public release date: Jan 01, 1971

DISCLAIMER

By accessing and using the Alberta Energy website to download or otherwise obtain a scanned mineral assessment report, you ("User") agree to be bound by the following terms and conditions:

- a) Each scanned mineral assessment report that is downloaded or otherwise obtained from Alberta Energy is provided "AS IS", with no warranties or representations of any kind whatsoever from Her Majesty the Queen in Right of Alberta, as represented by the Minister of Energy ("Minister"), expressed or implied, including, but not limited to, no warranties or other representations from the Minister, regarding the content, accuracy, reliability, use or results from the use of or the integrity, completeness, quality or legibility of each such scanned mineral assessment report;
- b) To the fullest extent permitted by applicable laws, the Minister hereby expressly disclaims, and is released from, liability and responsibility for all warranties and conditions, expressed or implied, in relation to each scanned mineral assessment report shown or displayed on the Alberta Energy website including but not limited to warranties as to the satisfactory quality of or the fitness of the scanned mineral assessment report for a particular purpose and warranties as to the non-infringement or other non-violation of the proprietary rights held by any third party in respect of the scanned mineral assessment report;
- c) To the fullest extent permitted by applicable law, the Minister, and the Minister's employees and agents, exclude and disclaim liability to the User for losses and damages of whatsoever nature and howsoever arising including, without limitation, any direct, indirect, special, consequential, punitive or incidental damages, loss of use, loss of data, loss caused by a virus, loss of income or profit, claims of third parties, even if Alberta Energy have been advised of the possibility of such damages or losses, arising out of or in connection with the use of the Alberta Energy website, including the accessing or downloading of the scanned mineral assessment report and the use for any purpose of the scanned mineral assessment report so downloaded or retrieved.
- d) User agrees to indemnify and hold harmless the Minister, and the Minister's employees and agents against and from any and all third party claims, losses, liabilities, demands, actions or proceedings related to the downloading, distribution, transmissions, storage, redistribution, reproduction or exploitation of each scanned mineral assessment report obtained by the User from Alberta Energy.

ECONOMIC MINERALS

FILE REPORT No.

S-AF-071(2)

APPENDIX A TO REPORT

DATED SEPTEMBER 1968

OF CORE DRILLING

IN THE

SENEX CREEK SULPHUR PROSPECT AREA

OF

ALBERTA, CANADA

FOR

WORLDWIDE ENERGY COMPANY LTD.

BY

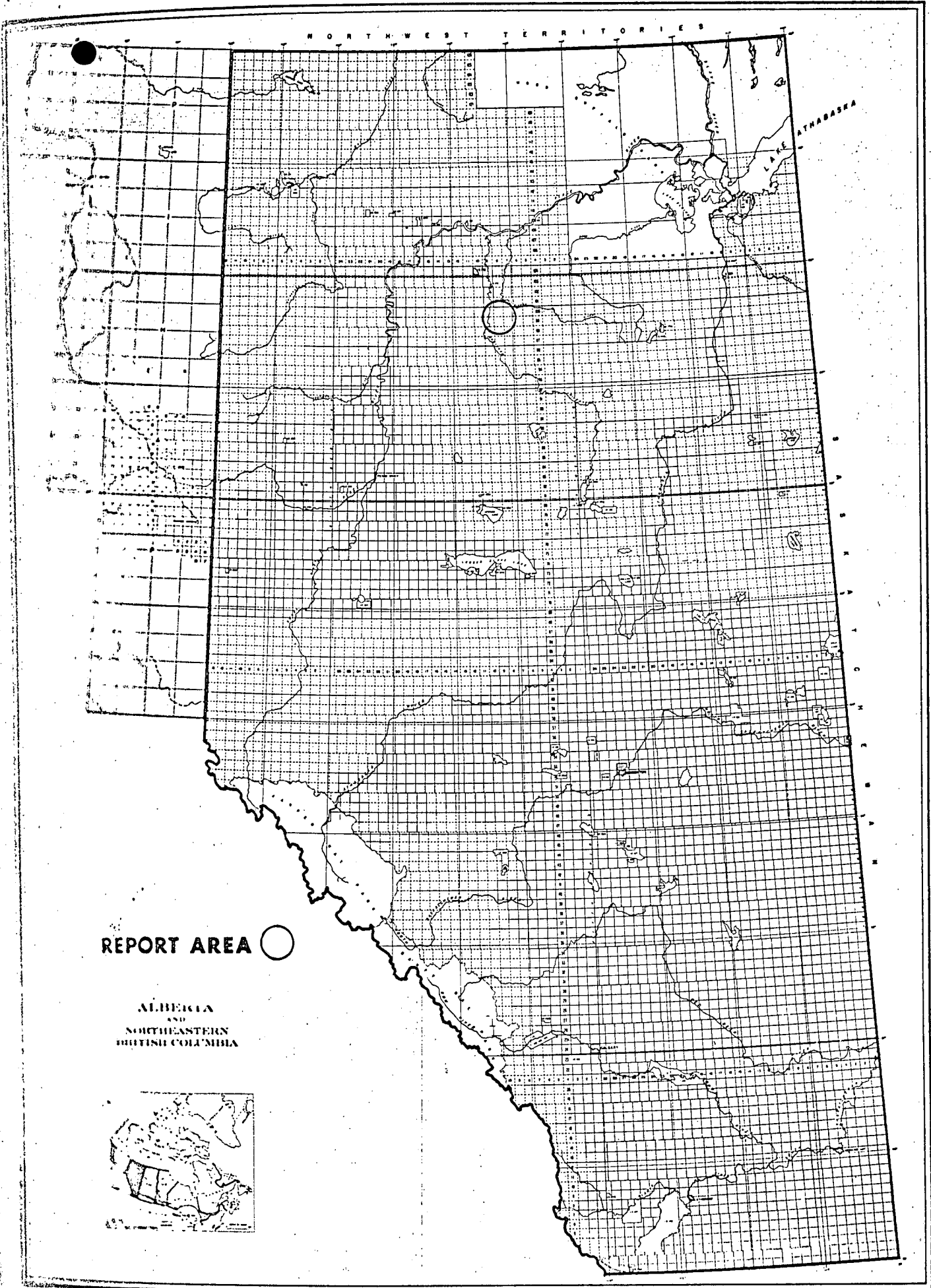
SIGMA EXPLORATIONS LTD.

PROJECT NO. 71

Calgary, Alberta, Canada

March 1969

INDEXING DOCUMENT NO. 700400



REPORT AREA ○

ALBERTA
AND
SOUTHEASTERN
BRITISH COLUMBIA



INDEX

Page No.

1 - 2
2
3 - 4
5 - 6
7 - 8
9 - 26

GENERAL DISCUSSION
WEATHER
PROGRAM
OPERATION
RESULTS & RECOMMENDATIONS
ASSAYS

1

ASSAY VALUES (PHASE 2)

GENERAL DISCUSSION

As the discussion concerning the location, topography and access has been thoroughly reviewed in previous reports, it is not considered necessary to deal further with these matters in this appendix.

As suggested in our report of September 1968, it was proposed that a survey be conducted across the permit area during the winter months, when frost conditions would permit travel by men and equipment over the entire permit area.

It was also considered desirable to mobilize the survey during 1969 because assay results obtained during the original survey indicated seven areas in Permit Number 71 which single assay values indicated accumulations of elemental sulphur ranging between 5% and 18%, and these areas required additional detailed drilling done to determine if commercial occurrences of sulphur were present in the area.

During the months of November and December a proposed exploration program was submitted to the management of Worldwide Energy Ltd. by Mr. J. D. Fowlie of Sigma Explorations Ltd., indicating the areas on the permit which were considered to warrant additional exploration. This program took into account the original area examined during the August survey, the results of the terrain analysis study made by Geo Photo Services Ltd. of Calgary and also the assay results obtained by Chemical & Geological Laboratories of Calgary. Discussions were also held between Mr. Fowlie and Mr. W. N. Morrison, the manager of

C. & Laboratories as to what should be considered optimum drilling depths and sampling intervals during any subsequent work.

This program was reviewed by Mr. Wayne Granger of Worldwide Energy Ltd., and the suggestion was made that rather than do a regional type of study over the entire permit area as well as detailed sampling over areas showing concentration of sulphur, that only those areas showing potential commercial deposits would be examined in detail and other reconnaissance work would be cancelled. The work commitment was reduced by approximately one-third by this decision and subsequent results have shown that this was a very valid decision.

WEATHER AND CLIMATIC CONDITIONS

Weather conditions during the execution of the survey were for the most part extremely severe. Temperatures at night fell as low as -70° below zero, with daytime temperatures seldom rising above -30° below. During periods of extreme cold weather (-60° and lower) it was considered to be impractical to conduct field operations because of the danger to men and equipment and all operations were suspended past this point. Because of the high risk of metallurgical failure in bulldozers and drilling equipment at temperatures of below -60° , and the result danger to men working around such equipment it was not considered prudent to continue operations past this limit.

Thus because of these sever conditions where temperatures seldom rise above -40° , the effective use of both bulldozers and drills was

severely restricted, and the production of both new line cut and drilling progress was adversely effected.

PROGRAM

The basic program executed during January and February of 1969 was a direct result of observations made of assays obtained from drilling results of the summer program of August 1968. In addition to this of course, was the information provided by the Terrain Analysis of the permit which indicated a faulting trend from a point approximately halfway up Permit 71 and located on the west side of the permit. This indicated fault trend generally appeared to strike to the northeast, and as most of the sulphur values had been obtained in this area it was considered logical that this area be examined in some detail.

The decision to limit the sampling rate to five feet was resolved by the fact that Permit Number 71 is located in a relatively remote geographical area in the Province of Alberta and if high grade elemental sulphur deposits were found in this area in thicknesses of less than five feet that they would, in all probability, not grade as commercial deposits. Also the fact that hole spacing on the detailed survey was reduced to three hundred feet it was probable that an excellent average of percent sulphur contained in the sub-surface would be indicated by the close spacing of the bore holes. The time of the survey in the field (starting dated January 20, 1969) was such that it would have been possible had commercial deposits of elemental

sulphur been indicated during this survey that additional core drilling using a reverse flush type of drill and obtaining all core from down the hole could have been mobilized, and the area detailed to a high degree before the onset of the spring breakup in this area.

OPERATIONS

As a result of previous exploration programs and studies seven selected areas were detailed as being worth further examination. Six of these areas were located in Twp. 100, Rge. 8 & 9, W.5M. and the seventh area was located in Twp. 99, Rge. 8, W.5M.

In all areas detailed drilling was conducted over areas of interest and samples were obtained from bore hole locations three hundred feet apart and drilled to a depth of twenty-two feet.

All natural phenomena was observed by the field supervisor during the progress of this survey, and the only observed feature that seemed to predominate was that a marked change in forest cover was exhibited at all points of interest where detailed work was being conducted. Upon examination of all seven areas of interest it was noted that this condition was uniformly exhibited throughout, however no significant conclusions could be drawn from this change in forestation because of the results of the assay values obtained.

Strong odours of sulphur were observed at certain areas and were examined in detail. Such areas included bore hole number 71-80-1 through 71-80-5 (to the south) and 71-40-92 through 71-40-87. At these points additional sampling was done, and water samples were

taken of some muskeg waters encountered during the drilling of these bore holes. The occurrence of these strong sulphur odours were at first followed by the crew with considerable enthusiasm as it was considered possible that a major occurrence of sulphur was present in the overburden. However, after examining the assay results and reflecting upon the occurrence of these odours in the field it is thought that the probable reason for their occurrence was actually the fact that small concentrations of hydrogen sulphide gas were trapped in the muskeg below the frost-line which would tend to be impermeable, and could therefore not escape to atmosphere. During drilling operations when this impermeable barrier was penetrated by drill holes in certain selected areas the hydrogen sulphide gas would be allowed to escape and thus produce the strong sulphur smell observed.

This condition was also noted on one of the small lakes used for a water supply by the drill where an extremely strong sulphur smell was noted. However subsequent tests of these water samples revealed only minute quantities of sulphur.

During the course of the survey, which was concluded in fifteen days a total of 222 holes were drilled and approximately 870 samples were obtained. 19½ miles of new line was cut by the bulldozers and an additional 25 miles of existing line was snowploughed for drilling and access. A total of 181 drill hours were utilized and approximately 440 bulldozer hours were necessary to cut-line and snow plow.

The excess bulldozer hours necessary to complete this program resulted from heavy stands of Spruce and Poplar encountered on some of the main lines which resulted in slow progress. Bulldozers were further hampered by the fact that many of the stumps from these trees were frozen into a solid mass of ice and it was virtually impossible for the bulldozers to obtain sufficient traction to dig them up. Thus it was necessary to detour around the larger stumps of many of the lines.

RESULTS & RECOMMENDATIONS

From observations made of the results of the assays made from samples taken during the 1969 survey it is suggested that no commercial deposits of elemental sulphur appear to exist on Permit Number 71.

The assay values obtained during the final phase of this survey are very disappointing, and although some measureable amount of sulphur appears to exist at nearly every drill location, the grade of such occurrence is so low that it is not considered feasible to attempt any further exploration in this area.

A rather wide discrepancy is noted between some of the results obtained during the summer survey of 1968 and the recent winter survey. The reasons for such a wide variation are not clearly understood, however after discussion with the assayer, Mr. W. N. Morrison, on this problem it would appear that some difficulty is experienced in lab work in obtaining highly accurate assays of samples which contain a large percentage of muskeg material.

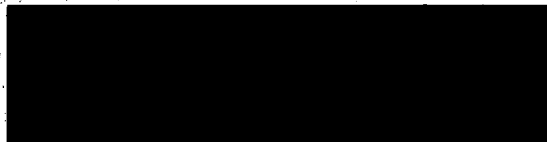
It is also considered probable that some of the high sulphur values observed in August of 1968 were in fact in solution in certain migrating ground water and such values would show definite trends along water courses. During periods when severe frost conditions were present the migration of these waters would all but cease and thus the resultant sulphur values would not be observed during the winter months. In conclusion it is suggested that from the results obtained by this recent survey, that no commercial deposits of

elemental sulphur are present in any of the areas surveyed in Permit Number 71. Unfortunately, because of the higher than average amount of sulphur present in the area certain leads were indicated suggesting that additional exploration was warranted in past surveys. These leads have now been thoroughly explored in detail and results are found to be non-commercial.

It is therefore recommended that sulphur Permit Number 71 be surrendered to the Government of the Province of Alberta and that no further work be carried out on this permit. The remote geographical location in combination with low sulphur values would suggest that any further expenditure of money on this property at this time would be unwarranted.

Respectfully submitted,

SIGMA EXPLORATIONS LTD.



J. D. Fowlie, Supervisor

CHEMICAL & GEOLOGICAL LABORATORIES LIMITED

OPERATOR: SIGMA EXPLORATIONS LIMITED

REPORT NUMBER: C69-4463

DATE SAMPLED: ---

DATE RECEIVED: January-February, 1969 DATE REPORTED: March 7, 1969

Kind of Sample: Soil

SAMPLE NUMBER	DEPTH (In Feet)	ELEMENTAL SULFUR (% by Weight on Dry Sample)	SAMPLE NUMBER	DEPTH (In Feet)	ELEMENTAL SULFUR (% by Weight on Dry Sample)
71-20-18	5	0.83	71-20-29	5	Trace (M)
71-20-18	10	Trace	71-20-29	10	Trace (M)
71-20-18	15	0.22	71-20-29	15	Trace (M)
71-20-18	23	Trace	71-20-29	23	0.38
71-20-19	5	Trace (M)	71-20-30	5	Trace
71-20-19	10	0.05	71-20-30	10	0.26
71-20-19	15	0.49	71-20-30	15	Trace
71-20-19	23	Trace	71-20-30	23	0.17
71-20-20	5	Trace (M)	71-20-31	5	Trace
71-20-20	10	Trace	71-20-31	10	Trace
71-20-20	15	0.24	71-20-31	15	Trace
71-20-20	23	Trace	71-20-31	23	0.53
71-20-21	5	0.43 (M)	71-20-32	5	Trace
71-20-21	10	0.49	71-20-32	10	Trace
71-20-21	15	Trace	71-20-32	15	0.36
71-20-6	15	0.43	71-20-32	23	Trace
71-20-6	20	0.74	74-1-11	5	Trace
71-20-7	5	Trace (M)	74-1-11	10	Trace
71-20-7	10	Trace (M)	74-1-11	15	0.32
71-20-7	15	Trace	74-1-11	23	Trace
71-20-7	20	Trace	74-1-12	5	Trace (M)
71-20-8	5	Trace (M)	74-1-12	10	Trace (M)
71-20-8	10	Trace	74-1-12	15	Trace
71-20-8	15	Trace	74-1-12	27	Trace
71-20-8	20	Trace	74-1-13	5	Trace (M)
71-20-9	5	0.15	74-1-13	10	Trace (M)
71-20-9	10	Trace	74-1-13	15	Trace (M)
71-20-9	15	Trace	74-1-13	23	Trace
71-20-9	20	0.64			

continued.....

OPERATOR: SIGMA EXPLORATIONS LIMITED

REPORT NUMBER: C69-4463

DATE SAMPLED: ---

DATE RECEIVED: January-February, 1969

DATE REPORTED: March 7, 1969

Kind of Sample: Soil

<u>SAMPLE NUMBER</u>	<u>DEPTH (In Feet)</u>	<u>ELEMENTAL SULFUR (% by Weight on Dry Sample)</u>	<u>SAMPLE NUMBER</u>	<u>DEPTH (In Feet)</u>	<u>ELEMENTAL SULFUR (% by Weight on Dry Sample)</u>
74-1-14	5	0.42	71-40-11	10	Trace
74-1-14	10	Trace (M)	71-40-11	15	Trace
74-1-14	15	Trace	71-40-11	22	Trace
74-1-14	27	Trace	71-40-12	5	Trace
74-1-15	5	Trace	71-40-12	10	Trace
74-1-15	10	Trace	71-40-12	15	0.72
74-1-15	15	Trace	71-40-12	22	0.56
74-1-15	23	2.04	71-40-13	5	N.L.
74-1-16	5	Trace	71-40-13	10	0.27
74-1-16	10	Trace	71-40-13	15	0.15
74-1-16	15	1.28	71-40-13	22	Trace
74-1-16	23	Trace	71-40-14	5	Trace
74-1-17	5	Trace	71-40-14	10	0.60
74-1-17	10	Trace	71-40-14	15	1.99
74-1-17	15	Trace	71-40-14	22	Trace
74-1-17	27	0.80	71-40-15	5	Trace
71-40-1	5	Trace	71-40-15	10	Trace
71-40-1	10	Trace	71-40-15	15	Trace
71-40-1	15	0.70	71-40-15	22	0.57
71-40-1	22	Trace	71-40-16	5	Trace
71-40-2	5	Trace	71-40-16	10	0.53
71-40-2	10	Trace	71-40-16	15	Trace
71-40-2	15	Trace	71-40-16	22	Trace
71-40-2	22	Trace	71-40-17	5	N.L.
71-40-3	5	N.L.	71-40-17	10	Trace
71-40-3	10	1.60	71-40-17	15	Trace
71-40-3	15	0.96	71-40-17	22	0.92
71-40-3	22	1.13	71-4-18	5	0.77
			71-4-18	10	Trace
			71-4-18	15	1.35
			71-4-18	18	Trace

continued.....

OPERATOR: SIGMA EXPLORATIONS LIMITED

REPORT NUMBER: C69-4463

DATE SAMPLED: ---

DATE RECEIVED: January-February, 1969 DATE REPORTED: March 7, 1969

Kind of Sample: Soil

<u>SAMPLE NUMBER</u>	<u>DEPTH (In Feet)</u>	<u>ELEMENTAL SULFUR (% by Weight on Dry Sample)</u>	<u>SAMPLE NUMBER</u>	<u>DEPTH (In Feet)</u>	<u>ELEMENTAL SULFUR (% by Weight on Dry Sample)</u>
74-1-30	23	Trace	71-40-5	5	Trace
74-1-31	5	Trace (M)	71-40-5	10	Trace
74-1-31	10	Trace	71-40-5	15	2.04
74-1-31	15	Trace (M)	71-40-5	22	Trace
74-1-31	23	Trace (M)	71-40-6	5	Trace
74-1-32	5	Trace (M)	71-40-6	10	Trace
74-1-32	10	Trace (M)	71-40-6	15	1.36
74-1-32	15	Trace (M)	71-40-6	20	Trace
74-1-32	23	Trace	71-40-7	5	0.59
74-1-33	5	Trace	71-40-7	10	1.26
74-1-33	10	Trace	71-40-7	15	Trace
74-1-33	15	Trace	71-40-7	22	Trace
74-1-33	23	0.36	71-40-8	5	1.45
74-1-7	5	Trace (M)	71-40-8	10	1.22
74-1-7	10	Trace	71-40-8	15	Trace
74-1-7	15	Trace	71-40-8	20	Trace
74-1-7	20	1.30	71-40-9	5	Trace
74-1-8	5	Trace	71-40-9	10	Trace
74-1-8	10	0.73	71-40-9	15	0.50
74-1-8	15	Trace	71-40-9	20	Trace
74-1-8	23	0.16	71-40-10	5	0.53
74-1-9	5	Trace	71-40-10	10	1.64
74-1-9	10	Trace	71-40-10	15	Trace
74-1-9	15	Trace	71-40-10	22	Trace
			71-40-11	5	0.58
71-40-4	5	Trace	71-40-11	10	Trace
71-40-4	10	0.92	71-40-11	15	Trace
71-40-4	15	Trace	71-40-11	22	Trace
71-40-4	22	Trace	71-40-12	5	Trace
			71-40-12	10	Trace
			71-40-12	15	0.92
			71-40-12	22	0.56

continued.....

OPERATOR: SIGMA EXPLORATIONS LIMITED

REPORT NUMBER: C69-4463

DATE SAMPLED: ---

DATE RECEIVED: January-February, 1969 DATE REPORTED:

Kind of Sample: Soil

<u>SAMPLE NUMBER</u>	<u>DEPTH (In Feet)</u>	<u>ELEMENTAL SULFUR (% by Weight on Dry Sample)</u>	<u>SAMPLE NUMBER</u>	<u>DEPTH (In Feet)</u>	<u>ELEMENTAL SULFUR (% by Weight on Dry Sample)</u>
71-20-1	5	1.68	71-20-24	5	Trace
71-20-1	10	0.05	71-20-24	10	Trace
71-20-1	15	0.83	71-20-24	15	Trace
71-20-1	20	Trace	71-20-24	20	Trace
71-20-2	5	Trace (M)	71-20-25	5	Trace (M)
71-20-2	10	2.14	71-20-25	10	Trace
71-20-2	15	0.52	71-20-25	15	Trace
71-20-2	20	3.06	71-20-25	20	Trace
71-20-3	5	Trace (M)	71-20-26	5	Trace (M)
71-20-3	10	Trace (M)	71-20-26	10	Trace (M)
71-20-3	15	1.44	71-20-26	15	2.21
71-20-3	20	Trace	71-20-26	20	Trace
71-20-4	5	0.32	71-20-27	5	Trace
71-20-4	10	Trace	71-20-27	10	Trace
71-20-4	15	Trace	71-20-27	15	Trace
71-20-4	20	Trace	71-20-27	20	Trace
71-20-5	5	1.50	71-20-28	5	Trace
71-20-5	10	Trace	71-20-28	10	1.80
71-20-5	15	1.20	71-20-28	15	Trace
71-20-5	20	1.80	71-20-28	20	2.17
71-20-6	5	0.26	71-40-33	5	3.06
71-20-6	10	0.44	71-40-33	10	0.36
71-20-21	20	Trace	71-40-33	15	1.44
71-20-22	10	Trace	71-40-33	20	1.02
71-20-22	15	0.57	71-40-35	5	Trace (M)
71-20-22	23	Trace	71-40-35	10	3.23
71-20-23	5	Trace (M)	71-40-35	15	2.30
71-20-23	10	Trace	71-40-35	20	0.73
71-20-23	15	Trace	71-40-36	5	Trace (M)
71-20-23	20	0.25	71-40-36	10	3.76
			71-40-36	15	4.47
			71-40-36	20	1.12

continued.....

OPERATOR: SIGMA EXPLORATIONS LIMITED

REPORT NUMBER: C69-4463

DATE SAMPLED: ---

DATE RECEIVED January-February, 1969

DATE REPORTED: March 7, 1969

Kind of Sample: Soil

<u>SAMPLE NUMBER</u>	<u>DEPTH (In Feet)</u>	<u>ELEMENTAL SULFUR (% by Weight on Dry Sample)</u>	<u>SAMPLE NUMBER</u>	<u>DEPTH (In Feet)</u>	<u>ELEMENTAL SULFUR (% by Weight on Dry Sample)</u>
71-40-37	5	0.79	71-40-24	5	Trace (M)
71-40-37	10	2.81	71-40-24	10	Trace
71-40-37	15	0.37	71-40-24	15	Trace
71-40-37	20	1.17	71-40-24	22	Trace
			71-40-25	5	Trace
71-40-18	5	Trace (M)	71-40-25	10	Trace
71-40-18	10	Trace	71-40-25	15	Trace
71-40-18	15	Trace	71-40-25	20	Trace
71-40-18	22	Trace	71-40-27	5	Trace
71-40-19	5	0.79	71-40-27	10	1.15
71-40-19	10	Trace	71-40-27	15	Trace
71-40-19	15	1.22	71-40-27	22	0.93
71-40-19	22	Trace	71-40-28	5	Trace
71-40-20	5	Trace (M)	71-40-28	10	Trace
71-40-20	10	Trace	71-40-28	15	Trace
71-40-20	15	Trace	71-40-28	22	1.21
71-40-20	22	Trace	71-40-29	5	Trace
71-40-21	5	Trace (M)	71-40-29	10	Trace
71-40-21	10	Trace (M)	71-40-29	15	Trace
71-40-21	15	Trace	71-40-29	22	1.14
71-40-21	22	Trace	71-40-31	5	Trace
71-40-22	5	Trace	71-40-31	10	Trace
71-40-22	10	0.45	71-40-31	15	2.05
71-40-22	15	Trace	71-40-31	22	Trace
71-40-22	22	0.84	71-40-32	5	Trace
71-40-23	5	Trace (M)	71-40-32	10	Trace
71-40-23	10	Trace	71-40-32	15	Trace
71-40-23	15	Trace	71-40-32	22	1.39
71-40-23	22	Trace	71-5-4	5	Trace (M)
			71-5-4	10	Trace (M)
			71-5-4	15	Trace
			71-5-4	23	Trace

continued.....

OPERATOR: SIGMA EXPLORATIONS LIMITED

REPORT NUMBER: C69-4463

DATE SAMPLED: ---

DATE RECEIVED: January-February, 1969 DATE REPORTED: March 7, 1969

Kind of Sample: Soil

<u>SAMPLE NUMBER</u>	<u>DEPTH (In Feet)</u>	<u>ELEMENTAL SULFUR (% by Weight on Dry Sample)</u>	<u>SAMPLE NUMBER</u>	<u>DEPTH (In Feet)</u>	<u>ELEMENTAL SULFUR (% by Weight on Dry Sample)</u>
71-30-6	5	2.72	71-40-38	5	Trace
71-30-6	10	Trace	71-40-38	10	Trace
71-30-6	15	1.46	71-40-38	15	2.01
71-30-6	23	Trace	71-40-38	22	0.60
71-30-7	5	1.55 (M)	71-40-39	5	Trace
71-30-7	10	Trace	71-40-39	10	Trace
71-30-7	15	1.56	71-40-39	15	0.85
71-30-7	23	Trace	71-40-39	22	0.86
71-30-8	5	Trace	71-40-40	5	Trace (M)
71-30-8	10	1.41	71-40-40	10	0.45
71-30-8	15	Trace	71-40-40	15	0.25
71-30-8	22	1.39	71-40-40	22	Trace
71-30-9	5	Trace (M)	71-40-41	5	Trace (M)
71-30-9	10	Trace	71-40-41	10	1.10
71-30-9	15	2.54	71-40-41	15	0.90
71-30-9	23	Trace	71-40-41	22	0.45
71-30-10	5	Trace (M)	71-40-42	5	Trace
71-30-10	10	Trace (M)	71-40-42	10	Trace
71-30-10	15	Trace	71-40-42	15	Trace
71-30-10	23	Trace	71-40-42	22	Trace
71-30-16	5	Trace (M)	71-40-43	5	Trace
71-30-16	10	Trace (M)	71-40-43	10	Trace
71-30-16	15	Trace	71-40-43	15	0.20
71-30-16	23	1.67	71-40-43	22	Trace
71-30-17	5	Trace (M)	71-40-44	5	Trace (M)
71-30-17	10	Trace (M)	71-40-44	10	0.50
71-30-17	15	Trace	71-40-44	15	0.40
71-30-17	22	.92	71-40-44	22	Trace

continued.....

OPERATOR: SIGMA EXPLORATIONS LIMITED

REPORT NUMBER: C69-4463

DATE SAMPLED: ---

DATE RECEIVED: January-February, 1969 DATE REPORTED: March 7, 1969

Kind of Sample: Soil

<u>SAMPLE NUMBER</u>	<u>DEPTH (In Feet)</u>	<u>ELEMENTAL SULFUR (% by Weight on Dry Sample)</u>	<u>SAMPLE NUMBER</u>	<u>DEPTH (In Feet)</u>	<u>ELEMENTAL SULFUR (% by Weight on Dry Sample)</u>
71-40-45	5	Trace	71-30-18	5	Trace
71-40-45	10	Trace	71-30-18	10	Trace
71-40-45	15	0.80	71-30-18	15	Trace
71-40-45	22	Trace	71-30-18	23	Trace
71-40-46	5	Trace (M)	71-30-19	5	Trace (M)
71-40-46	10	0.20	71-30-19	10	Trace
71-40-46	15	Trace	71-30-19	15	Trace
71-40-46	22	Trace	71-30-19	23	0.56
71-40-47	5	0.80	71-30-20	5	Trace (M)
71-40-47	10	0.21	71-30-20	10	Trace
71-40-47	15	0.10	71-30-20	15	0.89
71-40-47	22	No Sample	71-30-20	23	Trace
71-40-48	5	Trace	71-30-21	5	Trace (M)
71-40-48	10	0.70	71-30-21	10	Trace
71-40-48	15	Trace	71-30-21	15	0.90
71-40-48	22	0.25	71-30-21	23	Trace
71-40-49	5	Trace	71-30-22	5	Trace
71-40-49	10	Trace	71-30-22	10	1.45
71-40-49	15	Trace	71-30-22	15	Trace
71-40-49	22	0.30	71-30-22	23	Trace
71-40-50	5	Trace (M)	71-30-23	5	Trace
71-40-50	10	0.30	71-30-23	10	Trace
71-40-50	15	0.25	71-30-23	15	Trace
71-40-50	22	Trace	71-30-23	23	1.65
71-40-51	5	Trace (M)	71-30-24	5	Trace
71-40-51	10	0.25	71-30-24	10	Trace
71-40-51	15	0.10	71-30-24	15	1.73
71-40-51	22	Trace	71-30-24	23	2.25
71-40-52	5	Trace	71-30-25	5	1.26
71-40-52	10	Trace	71-30-25	10	Trace
71-40-52	15	Trace	71-30-25	15	Trace
71-40-52	22	Trace	71-30-25	23	Trace

continued.....

OPERATOR: SIGMA EXPLORATIONS LIMITED

REPORT NUMBER: C69-4463

DATE SAMPLED: ---

DATE RECEIVED: January-February, 1969 DATE REPORTED: March 7, 1969

Kind of Sample: Soil

<u>SAMPLE NUMBER</u>	<u>DEPTH (In Feet)</u>	<u>ELEMENTAL SULFUR (% by Weight on Dry Sample)</u>	<u>SAMPLE NUMBER</u>	<u>DEPTH (In Feet)</u>	<u>ELEMENTAL SULFUR (% by Weight on Dry Sample)</u>
71-30-26	5	Trace	71-30-35	5	0.54
71-30-26	10	0.49	71-30-35	10	Trace
71-30-26	15	1.96	71-30-35	15	Trace
71-30-26	23	Trace	71-30-35	23	1.12
71-30-27	5	Trace (M)	71-30-36	5	Trace
71-30-27	10	3.26	71-30-36	10	1.63
71-30-27	15	Trace	71-30-36	15	0.30
71-30-27	23	0.99	71-30-36	23	Trace
71-30-28	5	Trace (M)	71-30-37	5	0.68
71-30-28	10	0.74	71-30-37	10	Trace
71-30-28	15	Trace	71-30-37	15	1.49
71-30-28	23	Trace	71-30-37	23	Trace
71-30-30	5	Trace	71-30-38	5	0.45
71-30-30	10	Being Repeated	71-30-38	10	Trace
71-30-30	15	Trace	71-30-38	15	Being Repeated
71-30-30	23	0.54	71-30-38	23	0.59
71-30-31	5	0.66	71-30-39	5	Trace
71-30-31	10	Trace	71-30-39	10	1.19
71-30-31	15	Trace	71-30-39	15	0.48
71-30-31	23	Being Repeated	71-30-39	23	Trace
71-30-33	5	Trace	71-30-30	10	Trace
71-30-33	10	1.14	71-30-31	23	1.02
71-30-33	15	Trace	71-15-8	5	Trace
71-30-33	23	Trace	71-15-8	10	Trace
71-30-34	5	Trace	71-15-8	15	Trace
71-30-34	10	Trace	71-15-8	23	Trace
71-30-34	15	0.28			
71-30-34	23	Trace			

continued.....

OPERATOR: SIGMA EXPLORATIONS LIMITED

REPORT NUMBER: C69-4463

DATE SAMPLED: ---

DATE RECEIVED: January-February, 1969

DATE REPORTED: March 7, 1969

Kind of Sample: Soil

<u>SAMPLE NUMBER</u>	<u>DEPTH (In Feet)</u>	<u>ELEMENTAL SULFUR (% by Weight on Dry Sample)</u>	<u>SAMPLE NUMBER</u>	<u>DEPTH (In Feet)</u>	<u>ELEMENTAL SULFUR (% by Weight on Dry Sample)</u>
71-15-8-14	5	Trace (M)	71-15-8-22	5	Trace (M)
71-15-8-14	10	Trace (M)	71-15-8-22	10	Trace
71-15-8-14	15	0.19	71-15-8-22	15	Trace
71-15-8-14	23	0.50	71-15-8-22	23	Trace
71-15-8-15	5	Trace (M)	71-15-8-23	5	Trace (M)
71-15-8-15	10	Trace (M)	71-15-8-23	10	Trace (M)
71-15-8-15	15	Trace (M)	71-15-8-23	15	Trace (M)
71-15-8-15	23	2.22	71-15-8-23	23	0.49
71-15-8-16	5	Trace (M)	71-15-8-24	5	Trace (M)
71-15-8-16	10	Trace (M)	71-15-8-24	10	Trace
71-15-8-16	15	Trace	71-15-8-24	15	0.98
71-15-8-16	23	Trace	71-15-8-24	23	Trace
71-15-8-17	5	Trace	71-15-8-1	5	Trace (M)
71-15-8-17	10	Trace	71-15-8-1	10	Trace (M)
71-15-8-17	15	Trace	71-15-8-1	15	Trace (M)
71-15-8-17	23	Trace	71-15-8-1	23	Trace
71-15-8-18	5	Trace (M)	71-15-8-2	5	Trace
71-15-8-18	10	Trace	71-15-8-2	10	Trace
71-15-8-18	15	Trace	71-15-8-2	15	Trace
71-15-8-18	23	0.19	71-15-8-2	23	0.97
71-15-8-19	5	Trace (M)	71-15-8-3	5	Trace (M)
71-15-8-19	10	Trace	71-15-8-3	10	Trace (M)
71-15-8-19	15	0.71	71-15-8-3	15	Trace (M)
71-15-8-19	23	Trace	71-15-8-3	22	Trace
71-15-8-20	5	Trace (M)	71-15-8-4	5	Trace (M)
71-15-8-20	10	0.44	71-15-8-4	10	Trace
71-15-8-20	15	Trace	71-15-8-4	15	Trace
71-15-8-20	23	0.65	71-15-8-4	22	Trace
71-15-8-21	5	Trace (M)	71-15-8-5	5	Trace
71-15-8-21	10	1.16	71-15-8-5	10	0.77
71-15-8-21	15	Trace	71-15-8-5	15	Trace
71-15-8-21	23	Trace	71-15-8-5	23	Trace

continued.....

OPERATOR: SIGMA EXPLORATIONS LIMITED

REPORT NUMBER: C69-4463

DATE SAMPLED: ---

DATE RECEIVED: January-February, 1969 DATE REPORTED: March 7, 1969

Kind of Sample: Soil

<u>SAMPLE NUMBER</u>	<u>DEPTH (In Feet)</u>	<u>ELEMENTAL SULFUR (% by Weight on Dry Sample)</u>	<u>SAMPLE NUMBER</u>	<u>DEPTH (In Feet)</u>	<u>ELEMENTAL SULFUR (% by Weight on Dry Sample)</u>
71-15-8-6	5	Trace (M)	71-51-47	10	0.81
71-15-8-6	10	Trace (M)	71-51-47	15	0.57
71-15-8-6	15	Trace	71-51-47	22	4.23
71-15-8-6	23	3.00	71-40-58	5	0.24
71-15-8-7	5	Trace (M)	71-40-58	10	0.52
71-15-8-7	10	Trace	71-40-58	15	0.23
71-15-8-7	15	0.62	71-40-58	22	0.72
71-15-8-7	23	Trace	71-40-59	5	Trace
71-15-8-8	5	Trace (M)	71-40-59	10	0.21
71-15-8-8	10	Trace (M)	71-40-59	15	0.66
71-15-8-8	15	Trace	71-40-59	22	0.71
71-30-38	15	1.51	71-40-60	5	Trace (M)
71-40-53	5	Trace	71-40-60	10	Trace (M)
71-40-53	10	Trace	71040-60	15	Trace
71-40-53	15	Trace	71-40-60	22	Trace
71-40-53	22	Trace	71-40-61	5	Trace (M)
71-40-54	5	Trace (M)	71-40-61	10	0.24
71-40-54	10	Trace	71-40-61	15	0.72
71-40-54	15	0.28	71-40-61	22	Trace
71-40-54	22	Trace	71-40-62	5	Trace
71-40-55	5	Trace (M)	71-40-62	10	0.30
71-40-55	10	Trace (M)	71-40-62	15	1.12
71-40-55	15	Trace	71-40-62	22	1.38
71-40-55	22	Trace	71-40-63	5	Trace
71-40-56	5	Trace (M)	71-40-63	10	Trace
71-40-56	10	Trace (M)	71-40-63	15	Trace
71-40-56	15	Trace (M)	71-40-63	22	0.79
71-40-56	22	Trace	71-40-64	5	Trace
71-40-57	5	Trace (M)	71-40-64	10	Trace
			71-40-64	15	0.21
			71-40-64	22	Trace

continued.....

OPERATOR: SIGMA EXPLORATIONS LIMITED

REPORT NUMBER: C69-4463

DATE SAMPLED: ---

DATE RECEIVED: January-February, 1969

DATE REPORTED: March 7, 1969

Kind of Sample: Soil

<u>SAMPLE NUMBER</u>	<u>DEPTH (In Feet)</u>	<u>ELEMENTAL SULFUR (% by Weight on Dry Sample)</u>	<u>SAMPLE NUMBER</u>	<u>DEPTH (In Feet)</u>	<u>ELEMENTAL SULFUR (% by Weight on Dry Sample)</u>
71-40-65	5	Trace	71-15-8-8	23	Trace
71-40-65	10	0.74	71-15-8-9	5	Trace (M)
71-40-65	15	0.55	71-15-8-9	10	Trace (M)
71-40-65	22	0.38	71-15-8-9	15	Trace
71-40-66	5	0.12	71-15-8-9	23	Trace
71-40-66	10	1.07	71-15-8-10	5	Trace (M)
71-40-66	15	0.69	71-15-8-10	10	Trace (M)
71-40-66	22	0.48	71-15-8-10	15	Trace
71-40-67	5	0.50	71-15-8-10	23	Trace
71-40-67	10	0.24	71-15-8-11	5	Trace (M)
71-40-67	15	0.56	71-15-8-11	10	Trace
71-40-67	22	0.76	71-15-8-11	15	Trace
71-40-68	5	0.31	71-15-8-11	23	0.33
71-40-68	10	0.35	71-15-8-12	5	Trace (M)
71-40-68	15	Trace	71-15-8-12	10	0.71
71-40-68	22	0.42	71-15-8-12	15	Trace
71-40-69	5	Trace (M)	71-15-8-12	23	Trace
71-40-69	10	Trace	71-15-8-13	5	Trace (M)
71-40-69	15	Trace	71-15-8-13	10	Trace (M)
71-40-69	22	0.28	71-15-8-13	15	Trace
71-40-70	5	0.27	71-15-8-13	23	Trace
71-40-70	10	0.35	74-2-1	5	Trace
71-40-70	15	0.44	74-2-1	10	0.35
71-40-70	22	0.64	74-2-1	15	Trace
71-40-71	5	Trace	71-2-1	23	Trace
71-40-71	10	Trace	74-2-2	6	Trace
71-40-71	16	0.29	74-2-2	10	Trace
71-40-71	22	0.20	74-2-2	16	Trace (M)
71-40-72	5	Trace (M)	74-2-2	23	Trace (M)
71-40-72	10	0.10	74-2-3	5	Trace (M)
71-40-72	15	0.25	74-2-3	10	Trace (M)
71-40-72	22	0.50	74-2-3	15	Trace
71-40-73	5	Trace	74-2-3	23	0.52
71-40-73	10	0.23			continued.....

OPERATOR: SIGMA EXPLORATIONS LIMITED

REPORT NUMBER: C69-4463

DATE SAMPLED: ---

DATE RECEIVED: January-February, 1969

DATE REPORTED: March 7, 1969

Kind of Sample: Soil

SAMPLE NUMBER	DEPTH (In Feet)	ELEMENTAL SULFUR (% by Weight on Dry Sample)	SAMPLE NUMBER	DEPTH (In Feet)	ELEMENTAL SULFUR (% by Weight on Dry Sample)
74-2-4	5	Trace (M)	74-2-12	5	Trace (M)
74-2-4	10	Trace (M)	74-2-12	10	Trace
74-2-4	15	Trace (M)	74-2-12	15	Trace
74-2-4	23	Trace	74-2-12	23	6.33
74-2-5	5	Trace	74-2-13	5	Trace
74-2-5	10	Trace	74-2-13	10	Trace
74-2-5	15	Trace	74-2-13	15	Trace
74-2-5	20	0.18	74-2-13	23	Trace
74-2-6	5	Trace	74-2-14	5	Trace
74-2-6	10	Trace	74-2-14	10	Trace
74-2-6	15	Trace (M)	74-2-14	15	0.73
74-2-6	23	Trace (M)	74-2-14	23	Trace
74-2-7	5	Trace	74-2-15	5	Trace
74-2-7	10	Trace	74-2-15	10	Trace
74-2-7	15	1.52	74-2-15	15	0.73
74-2-7	23	1.03	74-2-15	23	Trace
74-2-8	5	Trace			
74-2-8	10	Trace	71-30-41	5	Trace
74-2-8	15	Trace	71-30-41	10	Trace
74-2-8	23	0.65	71-30-41	15	Trace
74-2-9	5	Trace	71-30-41	23	Trace
74-2-9	10	0.80	71-30-42	5	Trace
74-2-9	15	Trace	71-30-42	10	0.21
74-2-9	23	Trace	71-30-42	15	1.10
74-2-10	5	Trace (M)	71-30-42	23	Trace
74-2-10	10	Trace (M)	71-30-43	5	1.27
74-2-10	15	Trace	71-40-73	15	0.26
74-2-10	23	4.81	71-40-73	22	Trace
74-2-11	5	1.61	71-40-74	5	0.25
74-2-11	10	0.75	71-40-74	10	0.10
74-2-11	15	Trace	71-40-74	15	Trace
74-2-11	23	Trace	71-40-74	22	Nil

OPERATOR: SIGMA EXPLORATIONS LIMITED

REPORT NUMBER: C69-4463

DATE SAMPLED: ---

DATE RECEIVED: January-February, 1969

DATE REPORTED: March 7, 1969

Kind of Sample: Soil

SAMPLE NUMBER	DEPTH (In Feet)	ELEMENTAL SULFUR (% by Weight on Dry Sample)	SAMPLE NUMBER	DEPTH (In Feet)	ELEMENTAL SULFUR (% by Weight on Dry Sample)
71-40-75	5	0.37	71-30-46	5	0.61
71-40-75	10	0.25	71-30-46	10	0.60
71-40-75	15	0.27	71-30-46	15	Trace
71-40-75	22	0.16	71-30-46	23	Trace
71-40-76	5	No. Sample	74-1-34	5	0.74
71-40-76	10	0.23	74-1-34	10	0.25
71-40-76	15	0.57	74-1-34	15	Trace
71-40-76	22	Nil (sand)	74-1-34	23	Trace
71-40-77	5	Trace (M)	74-1-36	5	Trace
71-40-77	10	Trace (M)	74-1-36	10	Trace
71-40-77	15	0.70	74-1-36	15	0.65
71-40-77	22	Nil	74-1-36	23	Trace
71-40-78	5	Trace (M)	74-1-37	5	0.81
71-40-78	10	Nil	74-1-37	10	1.14
71-40-78	15	Nil	74-1-37	15	Trace
71-40-78	22	0.60	74-1-37	23	Trace
71-40-79	5	Trace	74-1-38	5	Trace (M)
71-40-79	10	0.25	74-1-38	10	Trace (M)
71-40-79	15	0.39	74-1-38	15	Trace (M)
71-40-79	22	0.27	74-1-38	23	Trace (M)
71-30-43	10	Trace (M)	74-1-39	5	Trace (M)
71-30-43	15	Trace	74-1-39	10	Trace
71-30-43	20	Trace	74-1-39	15	Trace
71-30-44	5	Trace	74-1-39	23	Trace
71-30-44	10	Trace	74-1-40	5	Trace (M)
71-30-44	15	Trace	71-1-40	10	Trace (M)
71-30-44	20	Trace	71-1-40	15	Trace (M)
71-30-45	5	Trace	71-1-40	23	Trace
71-30-45	10	Trace			
71-30-45	15	0.24	71-40-80	5	Trace
71-30-45	23	0.92	71-40-80	10	0.30
			71-40-80	15	0.23
			71-40-80	22	0.20

continued.....

x

OPERATOR: SIGMA EXPLORATIONS LIMITED

REPORT NUMBER: C69-4463

DATE SAMPLED: ----

DATE RECEIVED January-February, 1969

DATE REPORTED: March 7, 1969

Kind of Sample: Soil

<u>SAMPLE NUMBER</u>	<u>DEPTH (In Feet)</u>	<u>ELEMENTAL SULFUR (% by Weight on Dry Sample)</u>	<u>SAMPLE NUMBER</u>	<u>DEPTH (In Feet)</u>	<u>ELEMENTAL SULFUR (% by Weight on Dry Sample)</u>
71-40-81	5	Trace (M)	71-20-10	5	0.70
71-40-81	10	Trace	71-20-10	10	Trace
71-40-81	15	0.60	71-20-10	15	0.64
71-40-81	22	0.85	71-20-10	20	1.27
71-40-82	5	0.66	71-20-11	5	Trace (M)
71-40-82	10	Trace	71-20-11	10	0.23
71-40-82	15	Trace	71-20-11	15	0.60
71-40-82	22	Trace	71-20-11	20	1.38
71-40-83	5	Trace	71-20-12	5	Trace
71-40-83	10	0.11	71-20-12	10	Trace
71-40-83	15	0.91	71-20-12	15	0.23
71-40-83	22	0.28	71-20-12	20	0.68
71-40-84	5	Trace	71-20-13	5	Trace
71-40-84	10	Trace	71-20-13	10	0.21
71-40-84	15	0.70	71-20-13	15	0.40
71-40-84	22	0.20	71-20-13	23	Trace
71-40-85	5	Trace	71-20-14	5	Trace
71-40-85	10	Trace	71-20-14	10	0.70
71-40-85	15	0.27	71-20-14	15	Nil
71-40-85	22	Trace	71-20-14	23	0.26
71-40-87	5	Trace	71-20-15	5	Trace
71-40-87	10	0.04	71-20-15	10	0.26
71-40-87	15	Trace	71-20-15	15	0.17
71-40-87	22	0.36	71-20-15	23	0.40
71-40-88	5	0.77	71-20-16	5	0.12
71-40-88	10	0.19	71-20-16	10	0.25
71-40-88	15	Trace	71-20-16	15	1.01
71-40-88	22	Trace	71-20-16	23	0.39
			71-20-17	5	0.34
			71-20-17	10	Nil
			71-20-17	15	0.15
			71-20-17	23	Nil

OPERATOR: SIGMA EXPLORATIONS LIMITED

REPORT NUMBER: C69-4463

DATE SAMPLED: ---

DATE RECEIVED January-February, 1969

DATE REPORTED: March 7, 1969

Kind of Sample: Soil

<u>SAMPLE NUMBER</u>	<u>DEPTH (In Feet)</u>	<u>ELEMENTAL SULFUR (% by Weight on Dry Sample)</u>	<u>SAMPLE NUMBER</u>	<u>DEPTH (In Feet)</u>	<u>ELEMENTAL SULFUR (% by Weight on Dry Sample)</u>
71-30-1	5	Nil	71-30-14	5	0.48
71-30-1	10	Nil	71-30-14	10	0.71
71-30-1	15	Nil	71-30-14	15	Trace
71-30-1	22	Nil	71-30-14	22	Nil
71-30-2	5	Trace (M)	71-30-15	5	Nil
71-30-2	10	Trace (M)	71-30-15	10	Nil
71-30-2	15	Nil	71-30-15	15	Nil
71-30-2	22	Nil	71-30-15	22	Nil
71-30-3	5	Nil	71-30-29	5	Trace
71-30-3	10	Nil	71-30-29	10	Nil
71-30-3	15	Trace	71-30-29	15	Nil
71-30-3	22	Nil	71-30-29	22	Trace
71-30-4	5	Nil	71-30-32	5	Trace (M)
71-30-4	10	Nil	71-30-32	10	Nil
71-40-4	15	Nil	71-30-32	15	0.16
71-40-4	22	Nil	71-30-32	22	0.16
71-30-5	5	Trace (M)	71-40-12	5	0.31
71-30-5	10	0.24	71-40-12	10	0.18
71-30-5	15	0.34	71-40-12	15	0.70
71-30-5	22	0.13	71-40-12	22	Nil
71-30-11	5	Trace (M)	71-40-89	5	Nil
71-30-11	10	0.39	71-40-89	10	0.28
71-30-11	15	Nil	71-40-89	15	Nil
71-30-11	22	Nil	71-40-89	22	Nil
71-30-12	5	Trace	71-40-90	5	Nil
71-30-12	10	0.19	71-40-90	10	Trace
71-30-12	15	0.35	71-40-90	15	Nil
71-30-12	22	Nil	71-40-90	22	Nil
71-30-13	5	Nil	71-40-91	5	Nil
71-30-13	10	Nil	71-40-91	10	Nil
71-30-13	15	Nil	71-40-91	15	0.15
71-30-13	22	Trace	71-40-91	22	Nil

continued.....

OPERATOR: SIGMA EXPLORATIONS LIMITED

REPORT NUMBER: C69-4463

DATE SAMPLED: ---

DATE RECEIVED January-February, 1969

DATE REPORTED: March 7, 1969

Kind of Sample: Soil

<u>SAMPLE NUMBER</u>	<u>DEPTH (In Feet)</u>	<u>ELEMENTAL SULFUR (% by Weight on Dry Sample)</u>	<u>SAMPLE NUMBER</u>	<u>DEPTH (In Feet)</u>	<u>ELEMENTAL SULFUR (% by Weight on Dry Sample)</u>
71-40-92	5	Nil	71-40-100	5	Nil
71-40-92	10	Trace	71-40-100	10	Nil
71-40-92	15	Trace	71-40-100	15	Nil
71-40-92	22	Nil	71-40-100	22	Nil
71-40-93	5	Nil	71-50-1	5	Trace (M)
71-40-93	10	Nil	71-50-1	10	Nil
71-40-93	15	Nil	71-50-1	15	Nil
71-40-93	22	Nil	71-50-1	22	Trace
71-40-94	5	Trace (M)	71-50-2	5	Nil
71-40-94	10	Trace (M)	71-50-2	10	Nil
71-40-94	15	0.25	71-50-2	15	Trace (M)
71-40-94	22	0.22	71-50-2	22	Trace
71-40-95	5	Trace (M)	71-50-3	5	Nil
71-40-95	10	Trace	71-50-3	10	Nil
71-40-95	15	0.35	71-50-3	15	Nil
71-40-95	22	0.16	71-50-3	22	Trace
71-40-96	5	Trace	71-50-4	5	Trace (M)
71-40-96	10	Trace	71-50-4	10	Trace (M)
71-40-96	15	0.60	71-50-4	15	Trace
71-40-96	22	0.34	71-50-4	22	0.23
71-40-97	5	Trace	71-50-5	5	Trace (M)
71-40-97	10	Trace	71-50-5	10	Nil
71-40-97	15	0.20	71-50-5	15	Nil
71-40-97	22	Nil	71-50-5	22	Nil
71-40-98	5	Nil	71-50-6	5	0.15
71-40-98	10	Nil	71-50-6	10	Nil
71-40-98	15	Nil	71-50-6	15	Nil
71-40-98	22	0.17	71-50-6	22	0.17
71-40-99	5	Trace	71-50-7	5	Trace (M)
71-40-99	10	0.14	71-50-7	10	Trace (M)
71-40-99	15	Nil	71-50-7	15	Nil
71-40-99	22	Nil	71-50-7	22	0.22

continued.....

OPERATOR: SIGMA EXPLORATIONS LIMITED

REPORT NUMBER: C69-4463

DATE SAMPLED: ---

DATE RECEIVED: January-February, 1969

DATE REPORTED: March 7, 1969

Kind of Sample: Soil

SAMPLE NUMBER	DEPTH (In Feet)	ELEMENTAL SULFUR (% by Weight on Dry Sample)	SAMPLE NUMBER	DEPTH (In Feet)	ELEMENTAL SULFUR (% by Weight on Dry Sample)
71-50-8	5	Nil	71-50-17	5	Nil
71-50-8	10	0.36	71-50-17	10	Nil
71-50-8	15	0.28	71-50-17	15	0.21
71-50-8	22	0.17	71-50-17	22	0.37
71-50-9	5	Trace (M)	71-50-15	5	Nil
71-50-9	10	Nil	71-50-15	10	Nil
71-50-9	15	0.36	71-50-15	15	Trace
71-50-9	22	Nil	71-50-15	22	0.11
71-50-10	5	0.43	71-50-16	5	Trace (M)
71-50-10	10	1.06	71-50-16	10	Trace (M)
71-50-10	15	0.19	71-50-16	15	0.41
71-50-10	22	Nil	71-50-16	22	0.40
71-50-11	5	Trace	71-50-18	5	Trace
71-50-11	10	Trace	71-50-18	10	0.19
71-50-11	15	0.55	71-50-18	15	0.22
71-50-11	22	0.23	71-50-18	22	0.20
71-50-12	5	Trace (M)	71-50-19	5	Trace
71-50-12	10	Trace	71-50-19	10	Trace
71-50-12	15	Nil	71-50-19	15	0.24
71-50-12	22	Trace	71-50-19	22	0.25
71-50-13	5	Trace (M)	71-60-1	5	Nil
71-50-13	10	Trace (M)	71-60-1	10	Trace (M)
71-50-13	15	Trace	71-60-1	15	0.65
71-50-13	22	0.30	71-60-1	22	Trace
71-50-14	5	Trace (M)	71-60-2	5	Nil
71-50-14	10	Nil	71-60-2	10	Trace (M)
71-50-14	15	Trace	71-60-2	15	0.95
71-50-14	22	0.45	71-60-2	22	Nil
71-80-1	5	No Sample	71-80-2	5	Trace (M)
71-80-1	10	0.21	71-80-2	10	Nil continued.....
71-80-1	15	Trace	71-80-2	15	Nil
71-80-1	22	Trace	71-80-2	22	Trace

OPERATOR: SIGMA EXPLORATIONS LIMITED

REPORT NUMBER: C69-4463

DATE SAMPLED: ---

DATE RECEIVED January-February, 1969

DATE REPORTED March 7, 1969

Kind of Sample: Soil

SAMPLE NUMBER	DEPTH (In Feet)	ELEMENTAL SULFUR (% by Weight on Dry Sample)	SAMPLE NUMBER	DEPTH (In Feet)	ELEMENTAL SULFUR (% by Weight on Dry Sample)
71-70-1	5	Trace (M)	71-80-4	5	No Sample
71-70-1	10	Nil	71-80-4	10	Nil
71-70-1	15	Nil	71-80-4	15	Nil
71-70-1	22	Nil	71-80-4	22	Trace
71-70-2	5	Trace (M)	71-80-5	5	Trace
71-70-2	10	Nil	71-80-5	10	0.24
71-70-2	15	Nil	71-80-5	15	Trace
71-70-2	22	Nil	71-80-5	22	Trace
71-70-9	5	Nil	71-80-6	5	Nil
71-70-9	10	Nil	71-80-6	10	Nil
71-70-9	15	0.62	71-80-6	15	Nil
71-70-9	22	Trace	71-80-6	22	Nil
71-90-4	5	Trace (M)	71-90-1	5	Trace (M)
71-90-4	10	Trace (M)	71-90-1	10	Trace (M)
71-90-4	15	Trace (M)	71-90-1	15	Trace
71-90-4	22	Trace	71-90-1	22	Trace
71-70-3	5	0.17	71-90-2	5	Trace (M)
71-70-3	10	0.12	71-90-2	10	Trace
71-70-3	15	Trace	71-90-2	15	Nil
71-70-3	22	Trace	71-90-2	22	Nil
71-70-4	5	0.16	71-90-3	5	Trace (M)
71-70-4	10	Trace	71-90-3	10	Trace
71-70-4	15	Nil	71-90-3	15	Nil
71-70-4	22	Nil	71-90-3	22	Nil
71-70-5	5	Trace (M)	71-100-1	5	Trace (M)
71-70-5	10	Trace	71-100-1	10	Trace
71-70-5	15	Trace	71-100-1	15	Nil
71-70-5	22	Nil	71-100-1	22	Nil
71-70-6	5	Trace (M)	71-100-2	5	Trace (M)
71-80-3	5	No Sample	71-100-2	10	Trace (M)
71-80-3	10	0.27	71-100-2	15	Trace (M)
71-80-3	15	Trace	71-100-2	22	Nil
71-80-3	22	Nil			

continued.....

OPERATOR: SIGMA EXPLORATIONS LIMITED

REPORT NUMBER: C69-4463

DATE SAMPLED: ---

DATE RECEIVED: January-February, 1969

DATE REPORTED: March 11, 1969

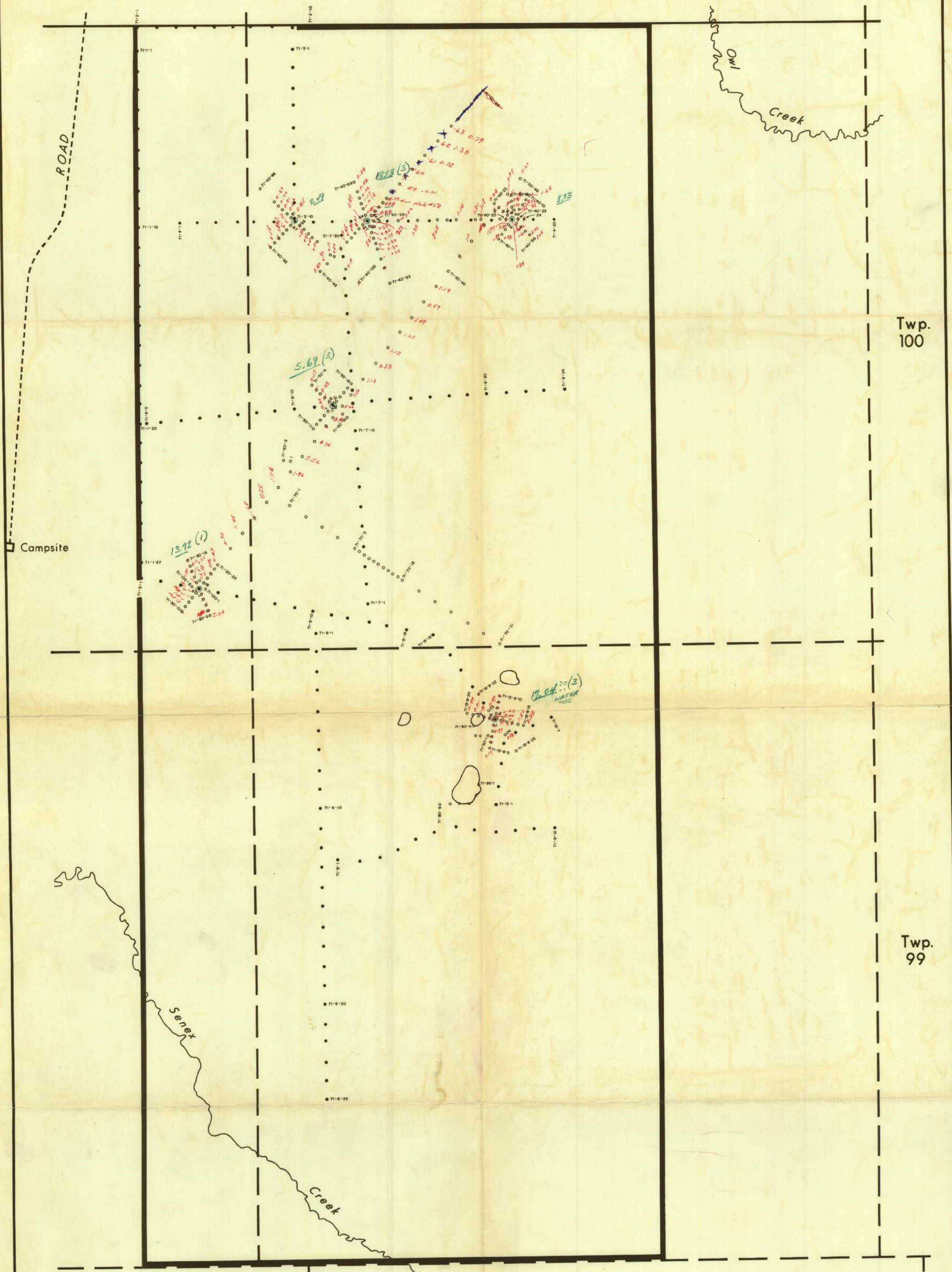
Kind of Sample: Soil

SAMPLE NUMBER	DEPTH (In Feet)	ELEMENTAL SULFUR (% by Weight on Dry Sample)	SAMPLE NUMBER	DEPTH (In Feet)	ELEMENTAL SULFUR (% by Weight on Dry Sample)
71-70-6	10	Nil	71-70-13	5	0.24
71-70-6	15	Nil	71-70-13	10	0.36
71-70-6	22	Nil	71-70-13	15	0.38
71-70-7	5	Trace	71-70-13	22	Trace
71-70-7	10	Nil	71-70-14	5	0.35
71-70-7	15	Nil	71-70-14	10	Trace
71-70-7	22	Trace	71-70-14	15	0.23
71-70-8	5	Trace (M)	71-70-14	22	Trace
71-70-8	10	Trace	71-70-15	5	Trace
71-70-8	15	Nil	71-70-15	10	Trace
71-70-8	22	0.41	71-70-15	15	Nil
71-70-10	5	Trace	71-70-15	22	Nil
71-70-10	10	Trace	71-70-19	5	Trace
71-70-10	15	0.45	71-70-19	10	Trace
71-70-10	22	0.15	71-70-19	15	Trace (M)
71-70-11	5	0.34	71-70-19	22	Trace
71-70-11	10	Trace	71-70-21	5	0.38
71-70-11	15	Nil	71-70-21	10	Trace
71-70-11	22	Trace	71-70-21	15	Nil
71-70-12	5	Trace	71-70-21	22	0.31
71-70-12	10	Trace			
71-70-12	15	Nil			
71-70-12	22	0.20			
71-70-16	5	Trace			
71-70-16	10	Trace			
71-70-16	15	Nil			
71-70-16	22	1.14			
71-70-17	5	No Sample			
71-70-17	10	Trace			
71-70-17	15	Nil			
71-70-17	22	Nil			

Rge. 9

Rge. 8

W.5 M.



Twp. 100

Twp. 99

- PERMIT OUTLINE
- NEW LINE CUT & DRILLED
- EXISTING LINE DRILLED

PRELIMINARY MAP

300' near higher 1000' RECON

SIGMA EXPLORATIONS LTD.
 309 81st Ave. S.W. Calgary, Alberta Phone 264-7865

SULPHUR EXPLORATION PROGRAM
 PERMIT No. 71
 (Phase II)

SCALE: 2"-1 mile

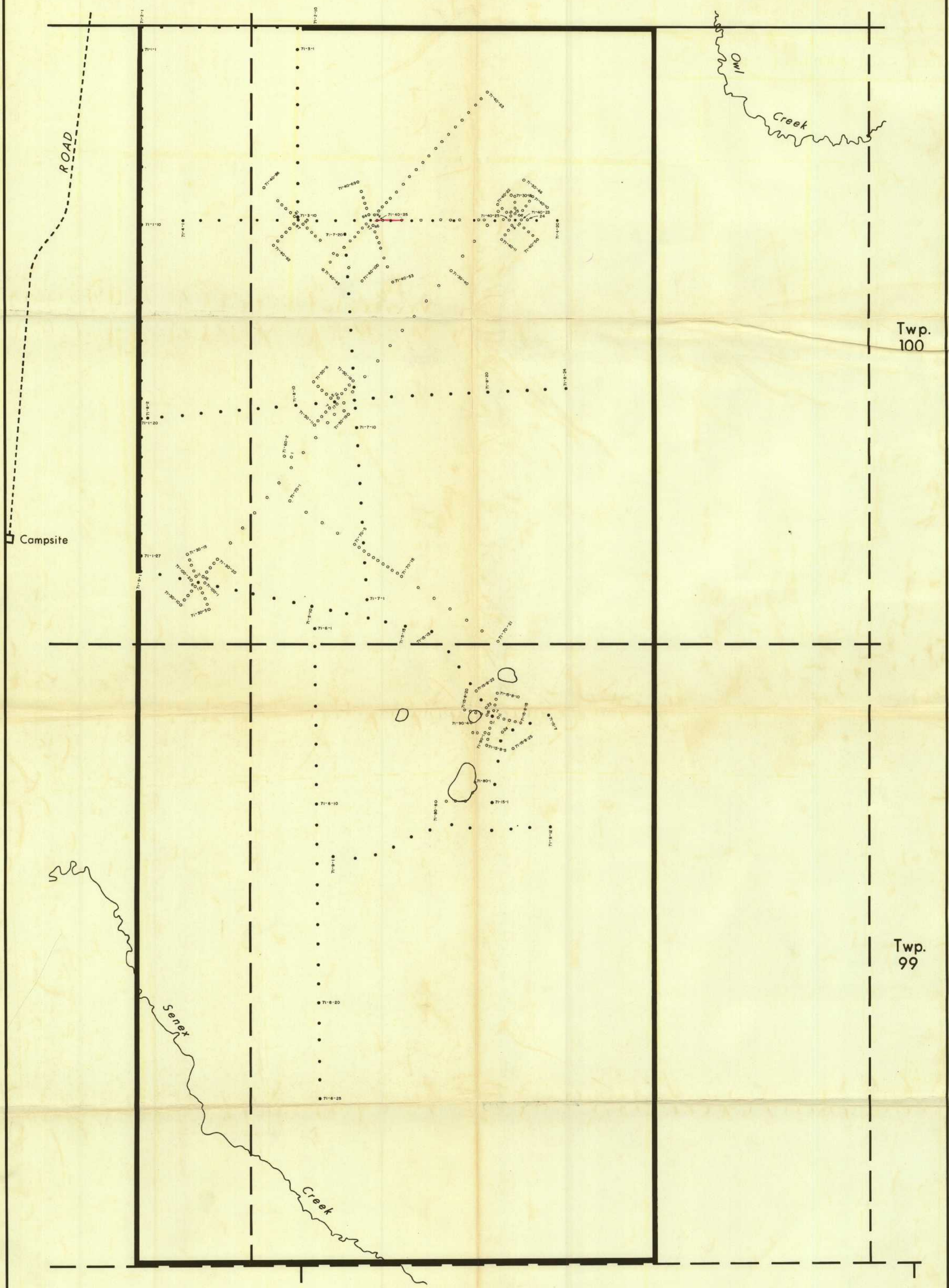
Feb. 14, 1969

Map #1
19690059

Rge. 9

Rge. 8

W.5 M.



Twp. 100

Twp. 99

- PERMIT OUTLINE
- NEW LINE CUT & DRILLED
- EXISTING LINE DRILLED

SIGMA EXPLORATIONS LTD.
 309 8th Ave. SW. Calgary, Alberta Phone 284-7865

SULPHUR EXPLORATION PROGRAM
 PERMIT No. 71
 (Phase II)

SCALE: 2"-1 mile

Feb. 14, 1969

Map #2
19690059

207