

ASSESSMENT REPORT *
DIAMOND DRILL HOLES

CHEVRON MM85-2
TOP CLAIM - MOUNT MAHON GROUP

COORDINATES:

574200E

5437100N

N.T.S. 82G/4

CHEVRON MM85-3
CHEV CLAIM - STAN CLAIM GROUP

COORDINATES:

572600E

5436160N

N.T.S. 82F/1

FORT STEELE MINING DIVISION
MOUNT MAHON AREA

Period: October 10, 1985 to November 8, 1985

Operator: Chevron Canada Resources Limited

Author: E. Titley

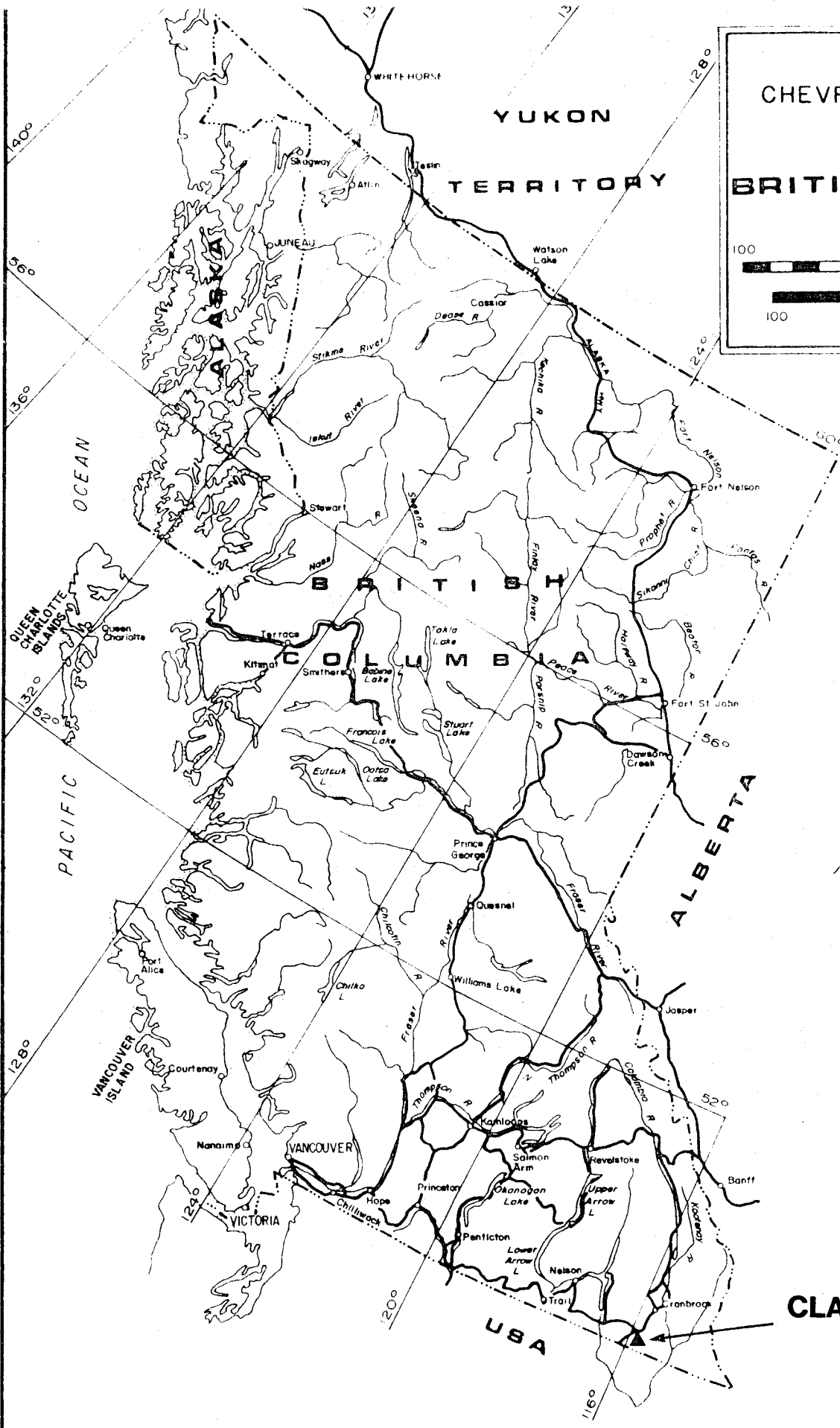
Date: December 1985

*Incorrectly given
082 82E 015 has
Stang. because first
letters (STAN) match &
in 82G*

ENTERED

all/07/1

* No associated Assessment Report Number
located



CHEVRON MINERALS LTD.

BRITISH COLUMBIA

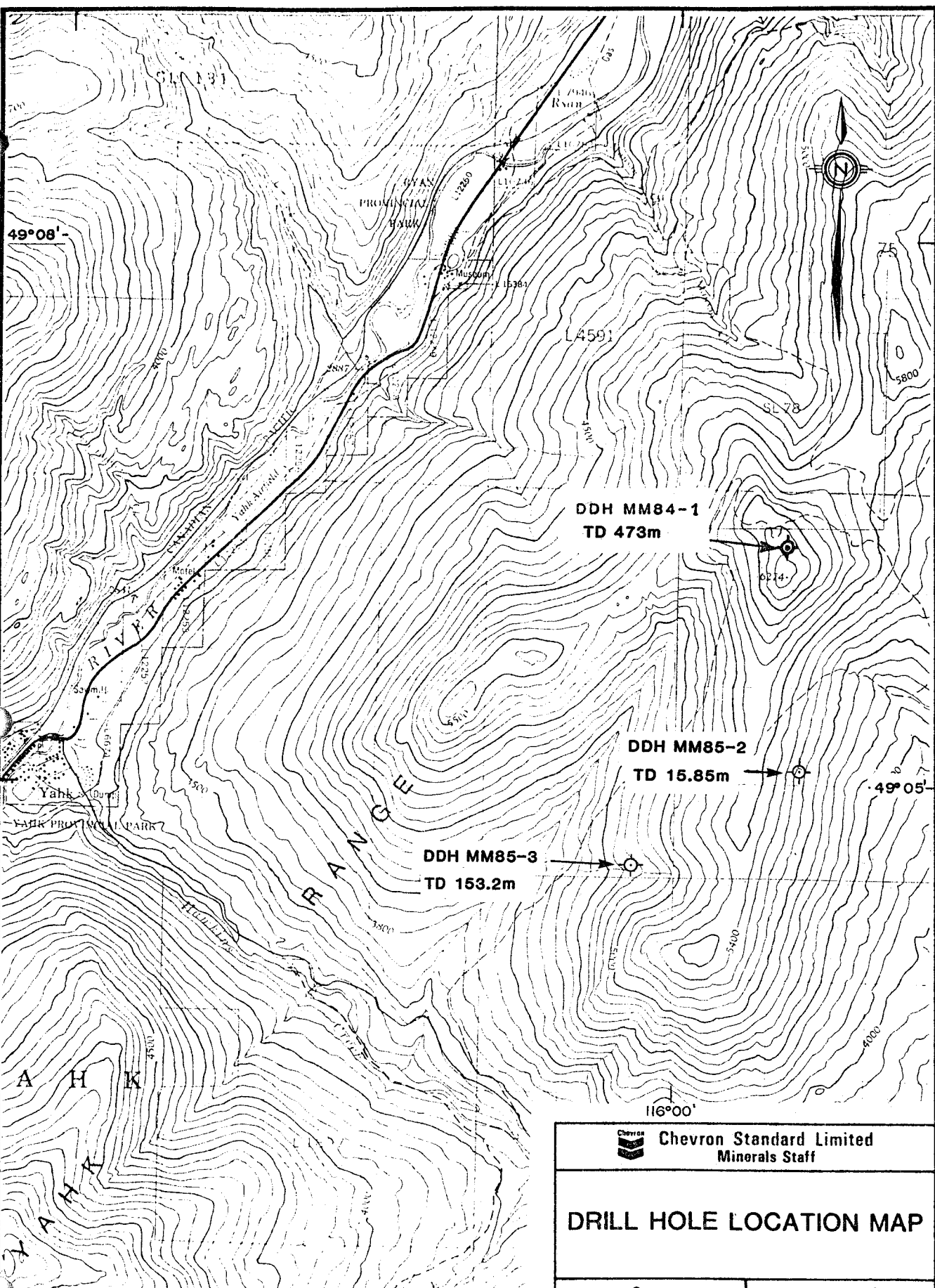
MILES


100 0 100 200

100 0 100 200 300 Km

FIGURE I
LOCATION MAP

CLAIM LOCATION



 Chevron Standard Limited Minerals Staff			
DRILL HOLE LOCATION MAP			
FIGURE No 2		PROJECT No M525	
DATE Feb. '85	REVISIONS	SCALE: 50,000	
NTS No 82G/4		FILE No	
COMPILED BY			



116°05'

BCIL 6755

1. INTRODUCTION

The Mount Mahon property is located in the Purcell Mountains in southeastern B. C. near the town of Yahk. Stratigraphically the Mount Mahon area is located near the Lower/Middle Aldridge contact which represents the Sullivan time horizon. Exploration on the property has been carried out with the objective to locate a Sullivan-type, shale-hosted Pb, Zn, Ag deposit at this time horizon.

Two diamond drill holes were targeted on UTEM anomalies on the flanks of Mount Mahon to test for sulphides and for stratigraphic indicators of the Lower/Middle Aldridge contact. Drillhole MM85-3 intersected several thin uneconomic zones with sulphide vein-type mineralization and provided stratigraphic information. Drillhole MM85-2 was abandoned due to poor weather conditions.

2. LOCATION AND ACCESS

The claim group is located in the Purcell Mountains in southeastern B.C. approximately 10 km northeast of the town of Yahk (Fig. 1). The property is reached by turning east off paved Highway #3 at the "Yahk - Meadow Creek Road" (locally known as Hawkins Creek Road), near the north end of the town of Yahk. The two diamond drill holes are located 1925 metres apart on either flank of the north-south trending ridge south of the Mt. Mahon summit (Fig. 2).

Diamond drillhole Chevron MM85-2 is accessed by turning north on Cold Creek Road at 11.6 km on the Hawkins Creek Road, and then by turning to the west onto the east Mount Mahon summit road at the ford of Cold Creek near km 4.7 on the Cold Creek Road. At 3.5 km from the Cold Creek ford an old logging mill site marks the start of the drill road. This road proceeds up and to the

west and subsequently the south following a system of old logging roads for 1.6 km and ends with 0.4 km of new road into the drill site. The old roads were substantially upgraded prior to drilling, however, access from the old mill site to the drill was restricted to tracked vehicles once drilling was underway.

Diamond drillhole Chevron MM85-3 is accessed by turning north at km 7 on the Hawkins Creek Road onto the west Mount Mahon summit road. At a distance of 3.6 km from this junction an old logging road leads up and to the east 0.7 km to the drill site. This road also required substantial upgrading but deteriorated to a condition that rendered it unusable to all but tracked vehicles.

Access between the drill sites is by the Mount Mahon summit. This route leads up and to the north from the old mill site to the summit and then down to the MM85-3 drill road on the west flank of the mountain, a distance of 9.1 km between access points. This route, when accessible by 4 x 4 during good weather, proved faster than the 15.4 km Cold Creek - Hawkins Creek route. Water for diamond drill hole MM85-3, the first of the two 1985 holes to be drilled, was provided by a 4 x 4 water truck with an 8200 litre (1800 UK gal) capacity feeding a 13600 litre (3000 UK gal) storage trailer near the drill site. This water was hauled from Hawkins Creek near km 4.0, a distance of 7.3 km. Because of the abundance of surface water on Mount Mahon during the fall and the difficult access to the drill sites by water truck, a 1830 m water line with three pumps and three coil stoves was set up to supply diamond drill hole MM85-2 from the sump 200 m west of the old mill site.

3. CLAIM STATUS

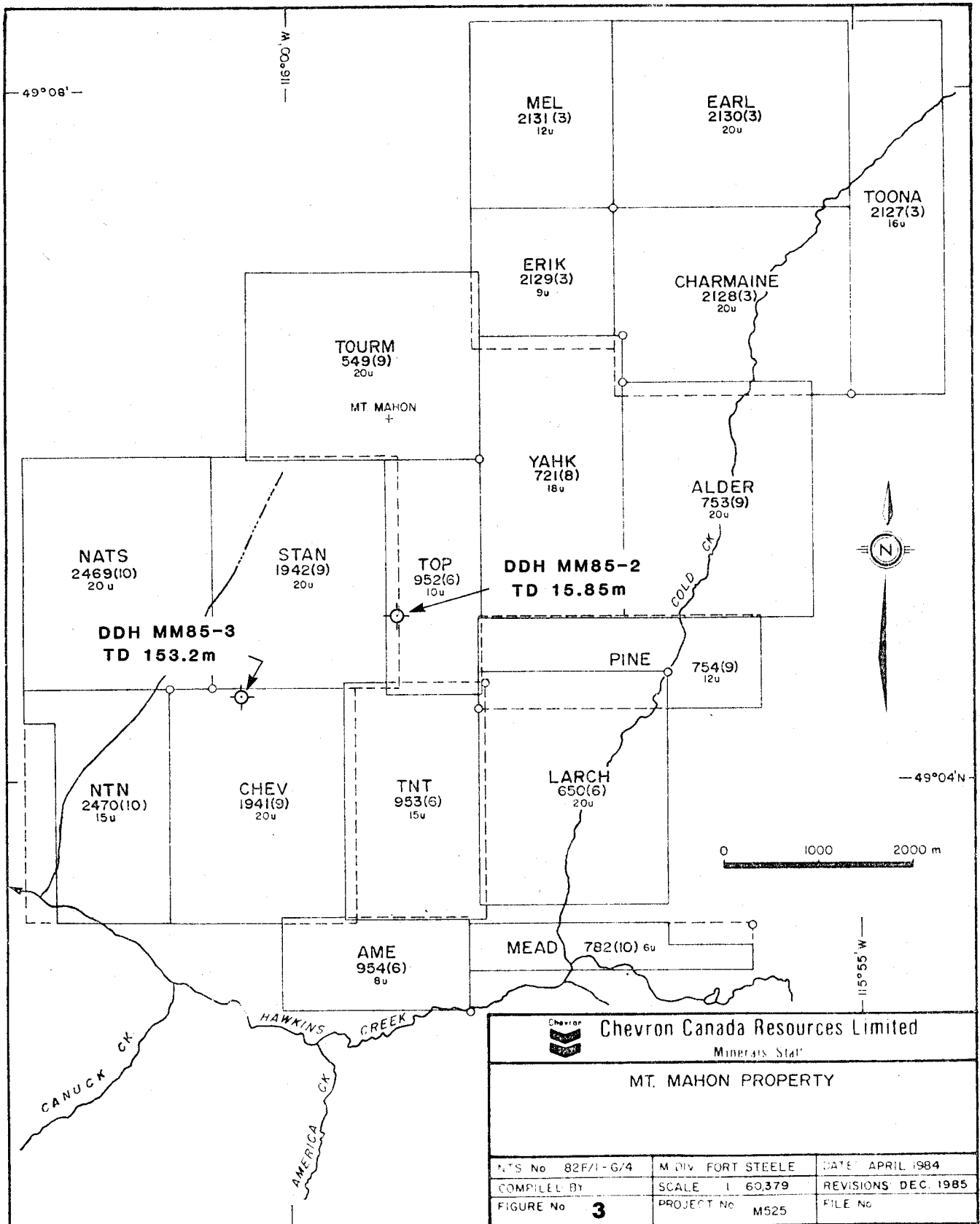
The current claim status (Dec.17,1985) is listed on Table I. Claim locations and corner post positions are plotted on Figure 3.


TABLE I

MOUNT MAHON PROSPECT

Unpatented Mineral Claims located in the Fort Steele Mining Division, Kootenay Land District, Province of British Columbia (NTS 82G/4 and 82F/1)

<u>CLAIM NAME</u>	<u>RECORD NO.</u>	<u>UNITS</u>	<u>DATE RECORDED</u>	<u>HECTARES</u>	<u>EXPIRY DATE</u>
TOURM	549	20	1978/09/21	500.0	1990/09/21
YAHK	721	18	1979/08/01	450.0	1990/08/01
AME	954	8	1980/06/20	200.0	1990/06/20
TNT	953	15	1980/06/20	375.0	1990/06/20
TOP	952	10	1980/06/20	250.0	1990/06/20
PINE	754	12	1979/09/07	300.0	1991/09/07
ALDER	753	20	1979/09/07	500.0	1990/09/07
MEAD	782	6	1979/10/09	150.0	1990/10/09
LARCH	650	20	1979/06/11	500.0	1990/06/11
CHEV	1941	20	1983/09/23	500.0	1990/09/23
STAN	1942	20	1983/09/23	500.0	1990/09/23
TOONA	2127	16	1984/03/05	400.0	1988/03/05
CHARMAINE	2128	20	1984/03/05	500.0	1988/03/05
ERIK	2129	9	1984/03/05	225.0	1988/03/05
EARL	2130	20	1984/03/05	500.0	1988/03/05
MEL	2131	12	1984/03/05	300.0	1988/03/05
NATS	2469	20	1985/10/30	500.0	1986/10/30
NTN	2470	15	1985/10/30	375.0	1986/10/50



 Chevron Canada Resources Limited Minerals Staff		
MT. MAHON PROPERTY		
NTS No 82F/1-G/4	M DIV FORT STEELE	DATE APRIL 1984
COMPILED BY	SCALE 1 60,379	REVISIONS DEC. 1985
FIGURE No 3	PROJECT No M525	FILE No

4. GEOLOGY

Outcrops and diamond drill core provide a limited amount of information on the geology of the Mount Mahon property. Extensive areas lack good exposures or drill hole data. Most outcrops are concentrated on Mount Mahon summit and nearby ridges. Diamond drilling has been somewhat concentrated in the eastern portion of the claims.

The claim block is underlain by flat-lying to gently dipping Middle Aldridge metasediments situated in the hinge zone of the Moyie Anticline. These metasediments, which consist primarily of sandstone with some siltstone and argillite, are cut by NW to NNE trending faults with stratigraphic displacements of several hundred metres. The Lower/Middle Aldridge contact has been identified at the bottom of hole DDH Chevron MM84-1 and represents the lowest stratigraphic element encountered in the area to date. Moyie gabbroic sills intrude the Aldridge metasediments in a number of places, although their extent and distribution are not well known.

The tourmalinite and intra-formational conglomerate, which occur near the summit of Mount Mahon, are deemed positive indicators in the overall exploration target model, as are the several occurrences of sulphide vein-type and minor sediment-hosted mineralization.

5. DRILL RESULTS

Vertical diamond drill hole MM85-2 was abandoned at a depth of 16 metres after penetrating 6 metres of overburden and 10 metres of Middle Aldridge Formation sandstone and minor siltstone. Six metres of casing and the casing shoe were left in the hole for re-entry purposes. The hole was also plugged with

wood to keep out unwanted material. The hole was abandoned due to lack of water and access problems due to poor weather conditions. The problems included: chronic waterline freezing; flooding of the access road at the Cold Creek ford; heavy snowfall on the Mount Mahon summit.

Vertical diamond drill hole MM85-3 was drilled to a total depth of 153 metres. Unconsolidated overburden of Quaternary to Recent Age, consisting of saturated clay with mixed boulders, was encountered from the surface down to 37 m. Middle(?) Aldridge Formation sandstone was penetrated from 37 to 80 m. The last 73 metres of the hole consists of a massive, gabbroic Moyie Intrusive body, probably a sill within the Aldridge metasediments. The sandstone is generally medium grey, fine grained, moderately well banded to locally laminated with up to 30% argillaceous layers. Quartz, biotite and muscovite are the main rock-forming minerals with accessory garnet, chlorite and pyrrhotite. The gabbro is dark green, medium to rarely coarse grained with abundant white to grey feldspar, common hornblende, biotite, muscovite, minor quartz, chlorite, garnet and trace to 1% pyrrhotite. Three pyrrhotite-quartz veins ranging from 6 mm to 9 cm (true width) were encountered within 10 metres of either side of the sandstone-gabbro contact. Minor amounts of copper, silver and gold were found in these veins, but negligible amounts of lead and zinc. A zone containing a 5 cm wide gabbro stringer in altered sandstone with 2.5% pyrrhotite was sampled from 68.5 to 69.0 m but yielded only negligible values in the above five elements.

The cores of DDH MM85-2 and MM85-3 are stored at Chevron Resources' warehouse facilities in Burnaby, B. C.

6. CONCLUSIONS

Diamond drill hole MM85-2 remains a favourable geophysical and geochemical target. It is recommended that this hole be completed as soon as conditions are favourable.

Diamond drill hole MM85-3 intersected minor sulphide vein mineralization near the contact of Middle Aldridge sandstone and a gabbro sill. The Lower/Middle Aldridge contact was not intersected, but may exist at some depth beneath the intrusion.

STATEMENT OF QUALIFICATIONS

ERIC D. TITLEY

I, Eric D. Titley, have an Honours B.Sc. degree in Earth Sciences (1980) from the University of Waterloo, in Ontario and have been employed as a geologist since my graduation. I have worked for the Ontario Geological Survey, Cominco Ltd., Dickenson Mines Ltd. and Samantha Exploration Ltd. on mineral exploration projects in a variety of locations.

I have been employed by Chevron Canada Resources Limited, 1900 - 1055 West Hastings St., Vancouver, B. C. in 1984 and 1985 on exploration projects within British Columbia.

I examined the diamond drill cores and carried out the sampling of the 1985 drilling at the Mount Mahon property.

DIAMOND DRILL RECORD

PROPERTY Mt. Mahon

HOLE No. MM 85-2

DIP TEST		
Footage	Angle	
	Reading	Corrected
NONE TAKEN		

Hole No. MM 85-2 Sheet No. 1 of 1

Lat. _____

Total Depth 15.85 m (52')

Section _____

Dep. _____

Logged By Eric Titley

Date Begun October 28, 1985

Bearing Vertical

Claim TOP

Date Finished November 6, 1985

Elev. Collar 1576 m (5170')

Core Size NQ

Grid Co-Ord. 1804S 503W

DEPTH (m)	DESCRIPTION	SAMPLE No.	WIDTH OF SAMPLE			
0-6.10	OVERBURDEN: - cased to 6.10 m.					
6.10-15.85	SANDSTONE: Medium to dark grey, fine grained to very fine grained, bedded, rarely laminated (1 mm to 4 cm beds/lams. @80°). Abundant biotite, common muscovite. - 1% pink garnets locally in patches. - 0.1% pyrrhotite in patchy concentrations and on veinlets, possible trace pyrite? Minor argillaceous layers. - 0.3% limonite envelopes. - a few narrow, irregular chloritic hairline fractures. - trace dendritic black pyrolusite on fractures. 8.8: 10 cm of dark grey siltstone, interbedded with sandstone. 2.5% pyrrhotite(?) in one sandstone layer. 2.5% dark, diffuse patches of fine sulphide in sandstone at 8.9. - recovery averages 96%. - no samples taken.					
15.85	- Hole abandoned (frozen waterlines). END OF HOLE					

DIAMOND DRILL RECORD

PROPERTY Mt. Mahon

HOLE No. MM 85-3

DIP TEST		
metrage Footage	Angle	
	Reading	Corrected
76.2 m	-86.867°	-86.0°
152.4 m	-85.867°	-84.5°

Hole No. MM85-3 Sheet No. 1 of 4

Lat. _____

Total Depth 153.31 m

Section _____

Dep. _____

Logged By Eric Titley

Date Begun Oct. 23, 1985

Bearing Vertical

Claim CHEV

Date Finished Oct. 27, 1985

Elev. Collar 1414 m

Core Size NQ

Grid Co-Ord. 3398S 1527W

DEPTH (m)	DESCRIPTION	SAMPLE No.	WIDTH OF SAMPLE			
0-36.6	<p>OVERBURDEN: Not recovered (triconed).</p> <p>- 0-9.1: Mostly clay with a few boulders.</p> <p>- 9.1-36.6: clay with boulders and broken rock.</p> <p>(Drilled on night shift). Return is mostly finely ground material. Return decreasing below 27.4. Spring at surface and at 27.4.</p> <p>- mixed sandstone and gabbro rubble in first box.</p>					
36.6-39.6	<p>SANDSTONE: med.-grey, fine gr., massive with locally banded (2mm - 15 cm bands @85°). Micaceous argillite layers.</p> <p>- abundant biotite muscovite.</p> <p>- 0.3% lim. on fractured envelopes.</p> <p>- 0.03% patchy dissem. pyrrhotite.</p> <p>- core is somewhat broken and blocky, recovery is about 75%.</p>					
39.6-79.6	<p>SANDSTONE: med-grey, fine gr., moderately well banded to locally lam. (bd 5-30 mm, lams. 1-2 mm, @85-90°), micaceous.</p> <p>- abundant black biotite, locally forming bands, common muscovite occurring in bands and on fractures.</p> <p>- 0.3% brown lim. on fractures, forming rusty zones and</p>					

a12/02/1

fractures, limonite decreasing w/depth.

DIAMOND DRILL RECORD

PROPERTY _____ Mt. Mahon _____

HOLE No. MM 85-3 _____

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. MM 85-3 Sheet No. 2 of 4 Lat. _____ Total Depth _____
 Section _____ Dep. _____ Logged By _____
 Date Begun _____ Bearing _____ Claim _____
 Date Finished _____ Elev. Collar _____ Core Size _____

DEPTH (m)	DESCRIPTION	SAMPLE No.	WIDTH OF SAMPLE			
39.6-79.6 (cont'd)	- 0.1-1% pyrrhotite in dissem. patchy concentrations, Pyrrhotite silicate patches, and in veinlets sometimes with quartz					
	- 2-8 mm pink garnets in local patches (i.e. 51.8), several rare trace of green chlorite on hairline fractures					
	- driller noted several clay seams, probably only a few of them were recovered (i.e. 52.6). Some ground core and broken zones. Overall recovery about 85%					
	- 39.8, 40.8: possible pinstripe(?) laminated					
	- 43.4: possible flame structure and white concretions (1 cm, elongated parallel to banding) in rusty zone with vague black hairlines, micaceous?					
	- 48.5: Pyrrhotite and soft light blue mineral on narrow 40° fracture					
	- 51.8: 2 - 3 cm patch of pink 2 - 8 mm garnets					
	- 52.6: 1 cm light brown clay seam at 90°					
	- 64.8: a few rimmed ovoids (concretions?), 1-3 cm. 2.5% patchy dissem. and veinlets. Pyrrhotite over 5 cm.					
	- 53.5-53.7: 0.03% Py in veinlets, 2.5% dissem. pyrrhotite					
	- 68.2: 1 cm wide, light green, med. grained stringer of altered gabbro(?) @40°. Tr. of dark dendritic mineral					

DIAMOND DRILL RECORD

PROPERTY Mt. Mahon

HOLE No. MM 85-3

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. MM85-3 Sheet No. 3 of 4
 Section.....
 Date Begun.....
 Date Finished.....

Lat..... Total Depth.....
 Dep..... Logged By.....
 Bearing..... Claim.....
 Elev. Collar..... Core Size.....

DEPTH (m)	DESCRIPTION	SAMPLE No.	WIDTH OF SAMPLE	Cu%	Pb%	Zn%	Ag g/t
39.6-79.4 (cont'd)	- 68.6: 5 cm wide med. grained (2 - 4 mm) Gabbro dyke @80°. Altered contact zone with 2.5% pyrrhotite from 68.5 to 68.9	68.5-69.0 8552501	0.5	<0.01	< 0.01	< 0.01	0.07 Au g/t <0.07
	- 68.9-71.4: 1% dissem. pyrrhotite						
	- 70.4-70.5: irregular mud seam						
	- 71.2: boxwork(?) texture of black hairline fractures						
	- 71.3-72.2: broken core with 1% orange limonite and 0.1% black pyrolusite						
	- 72.2-72.7: dark grey, very fine grained, well bedded (bd, 1 cm @60°) sst. with silty laminations.						
	- 72.7-72.9: zone with contorted lam. (soft sed. deformation?)						
	- 73.2: 1 cm wide vein w/70% limonite, 25% quartz and 5% hematite						
	- 74.9: 6 mm wide pyrrhotite vein @30°	74.8-75.0 8552502	0.2	0.11	<0.01	< 0.01	1.03 Au g/t 0.14
	- 74.4-74.9: zone with wispy black biotite and minor chlorite						
	- 75.4: 1 cm wide quartz-feldspar vein @30°						
79.4-80.16	GABBRO: dark grey green, med. grained sill? Contact obscured in zone of coarse grained micaceous minerals. No chilled margin noted.						

DIAMOND DRILL RECORD

PROPERTY Mt. Mahon

HOLE No. MM85-3

DIP TEST		
Footage	Angle	
	Reading	Corrected

Hole No. MM85-3 Sheet No. 4 of 4 Lot..... Total Depth.....
 Section..... Dep..... Logged By.....
 Date Begun..... Bearing..... Claim.....
 Date Finished..... Elev. Collar..... Core Size.....

DEPTH (m)	DESCRIPTION	SAMPLE No.	WIDTH OF SAMPLE	Cu%	Pb%	Zn%	Ag g/t
80.16-80.25	VEIN: 70% pyrrhotite, 20% quartz, 5% fine grained silvery mineral within pyrrhotite, 5% actinolite(?). U.C.@50°. L.C. @40° - true width 7 cm? vuggy texture	80.16-80.25 8552503	0.09	0.17	< 0.01	< 0.01	2.05 Au g/t 1.03
80.25-153.3	GABBRO: dark green, med. grained (2-4 mm), rarely coarse grained (to 6 mm) sill? - abundant white to grey feldspar, common hornblende, biotite, muscovite, rare quartz, chlorite, garnet - 0.1-1% pyrrhotite in patchy dissem. concentrations, pyrrhotite-silicate patches and quartz veins and or fractures - 85.98-86.05: vuggy vein at 40° with massive 85% pyrrhotite, 10% quartz, 2.5% silvery mineral - 5 to 7 cm true width	85.98-86.05 8552504	0.07	0.14	< 0.01	< 0.01 Au g/t 0.21	
80.25-153.3	- overall recovery in the sill is about 95%. - 119.6 - 120.2: broken core - 120.8-120.9: some redrilled core, possible caved material and sand (cuttings?) - 124.4: 90% quartz- 5% pyrrhotite vein with 2.5% garnet and 2.5% chlorite @20° (2 cm) - 130.3: 90% quartz vein with 7% pyrrhotite and 3% garnet @20°? (2 cm).						

a12/02/4

END OF HOLE

CHEVRON CANADA RESOURCES

MINERALS STAFF

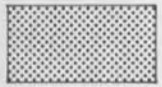
HOLE No. MM 85-2	PROJECT M525	PROPERTY MOUNT MAHON	STARTED: OCTOBER 28, 1985 FINISHED: NOVEMBER 6, 1985
COORDINATES 574200 E 5437100 N	AZ.: VERTICAL	DIP-COLLAR: -90° ACID DIP TESTS: None taken	T.D.: 15.85m (52')
	EL.: 1576 m (5170')		LOGGED BY: ERIC TITLEY



Light to medium grey, fine to very fine grained sandstone. Massive beds, often with graded tops, which range up to 35 cm or more (as much as 80cm) in thickness. Intervals include up to 40% intercalated siltstone/argillite



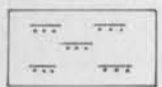
Light to dark grey, fine to very fine grained sandstone. Massive or graded beds ≤ 30cm thick. Intervals include up to 50% intercalated siltstone/argillite



Medium grey very fine grained quartzite. Massive beds generally ≤ 35 cm thick (rarely to 50cm[±]). Intervals include up to 35% intercalated siltstone/argillite



Thinly bedded and/or laminated light to dark grey siltstone and argillite. Intervals include up to 50% sandstone in beds ≤ 35cm thick (rarely to 50cm[±])



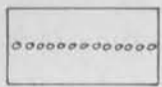
Interval dominated by graded couplets of medium to dark grey siltstone and lighter grey argillite



Interval dominated by finely laminated (usually po-rich) medium to dark grey "pinstriped" siltstone to argillaceous siltstone

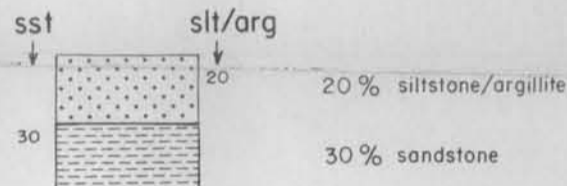


Massive medium to dark grey siltstone with 1 to 5% po as evenly disseminated blebs and grains



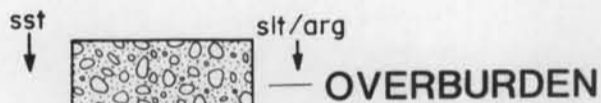
Intraformational conglomerate; angular to partially rounded flat fragments and contorted lenses of siltstone/argillite within a fine to very fine grained sandstone matrix

- = Pinstripe laminations
- ≠ Planar banded "marker" siltite
- ≡ Graded beds and laminae
- ≡≡ Cross laminae
- ∇ Scour and fill
- ∩ Load casts, flames
- Concretions
- ▲ Rip-up clasts
- ▼ Exotic clast
- T; ▼T Tourmalinization; Tourmalinite clast
- * Muscovite porphyroblasts in sandstone or quartzite
- XX Quartz (± sulphides) vein
- ~ Fault; brecciated or gouge zone



METRES

0 -



SANDSTONE: MED. GREY, FINE GR. BEDDED, MINOR SILTSTONE.

15.85m HOLE ABANDONED
(52')

50 -

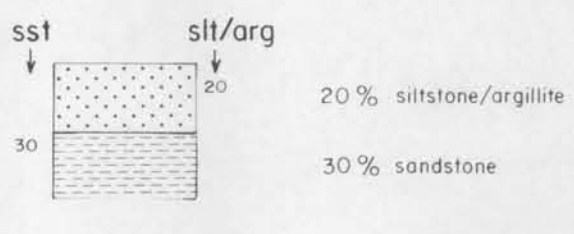
100 -

CHEVRON CANADA RESOURCES MINERALS STAFF

HOLE No. MM 85-3	PROJECT M525	PROPERTY MOUNT MAHON	STARTED: OCTOBER 23, 1985 FINISHED: OCTOBER 27, 1985
COORDINATES 572600 E 5436160 N	AZ.: VERTICAL EL.: 1414 m (4640')	DIP-COLLAR: 90° ACID DIP TESTS: 76.2m (250') - 86.0° 152.4m (500') - 84.5°	T.D.: 153.3m (503') LOGGED BY: ERIC TITLEY

- Overburden:** clay with boulders and broken rock.
- Gabbro:** dark green, medium grained to locally coarse grained.
- Light to medium grey, fine to very fine grained sandstone. Massive beds, often with graded tops, which range up to 35 cm or more (as much as 80cm) in thickness. Intervals include up to 40% intercalated siltstone/argillite
- Light to dark grey, fine to very fine grained sandstone. Massive or graded beds ≤ 30cm thick. Intervals include up to 50% intercalated siltstone/argillite
- Medium grey very fine grained quartzite. Massive beds generally ≤ 35 cm thick (rarely to 50 cm⁴). Intervals include up to 35% intercalated siltstone/argillite
- Thinly bedded and/or laminated light to dark grey siltstone and argillite. Intervals include up to 50% sandstone in beds ≤ 35 cm thick (rarely to 50 cm⁴)
- Interval dominated by graded couplets of medium to dark grey siltstone and lighter grey argillite
- Interval dominated by finely laminated (usually po-rich) medium to dark grey "pinstriped" siltstone to argillaceous siltstone
- Massive medium to dark grey siltstone with 1 to 5% po as evenly disseminated blebs and grains
- Intraformational conglomerate; angular to partially rounded flat fragments and contorted lenses of siltstone/argillite within a fine to very fine grained sandstone matrix

- ^^ Gabbro stringer
- ++ Sulphide vein
- = Pinstripe laminations
- ≠ Planar banded "marker" siltite
- Graded beds and laminae
- Cross laminae
- ∩ Scour and fill
- ∩ Load casts, flames
- Concretions
- ▲ Rip-up clasts
- ▼ Exotic clast
- T; ▼ T Tourmalinization; Tourmalinite clast
- * Muscovite porphyroblasts in sandstone or quartzite
- XX Quartz (± sulphides) vein
- ~ Fault; brecciated or gouge zone



METRES

