

PROPOSED DALY UNIT NO. 22
APPLICATION FOR ENHANCED OIL RECOVERY WATERFLOOD PROJECT
LODGEPOLE FORMATION
DALY, MANITOBA

September 1, 2024
Corex Resources Ltd.

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INTRODUCTION

The Daly portion of the Daly Sinclair Field is situated in Townships 8 to 11, Ranges 27 to 29 W1M and was developed in the 1950's with vertical wells. Technological advances in drilling and completion techniques, specifically with respect to horizontal wells, have revived field activity in this area. The proposed unit area lies to the east of Daly Unit No. 3 in which Corex Resources Ltd. ("Corex") is the licensed operator and sole working interest owner. In May 1984, the first well (100/12-07-010-27W1/00) was drilled within the proposed unit area and produced until March 2013. This vertical well is now abandoned and its surface has been reclaimed. The first horizontal wells within the proposed unit lands were drilled in January 2018 and are 102/01-12-010-28W1 and 102/02-12-010-28W1, which are cross-over wells whereby a portion of the production is from Daly Unit No. 3 and a portion of the production from the proposed Daly Unit No. 22. Successful horizontal well results lead Corex to drill further horizontal wells either fully or partially within the proposed unit boundary.

Corex, as operator and sole working interest owner, is proposing a unit be created which will include the W½ of Section 7-10-27W1, less LSD 4. The unit lands will include LSD's 3, 5, 6, 11, 12, 13, and 14 of Section 7 of Township 10 Range 27W1. Consistent with the reservoir characteristics of the offsetting lands, Corex believes the potential exists for incremental production and reserves from an Enhanced Oil Recovery (EOR) waterflood project in the Lodgepole formation. As of May 2024, the proposed application area contained ten (10) wells which status can be broken down as follows: one (1) vertical well, which has been abandoned and surface reclaimed and nine (9) horizontal Lodgepole wells. All nine horizontal wells have a portion of the well situated within the proposed unit boundary and a portion within Daly Unit No. 3. We anticipate converting some of the producing Lodgepole horizontal wells into injectors when implementing the EOR waterflood project. Our plan would be to produce any newly drilled wells for a minimum of one (1) year before such conversion. Corex hereby applies to establish Daly Unit No. 22 and implement an EOR Waterflood Project within the Lodgepole formation (Figure 1).

The proposed Daly Unit No. 22 falls within the Daly Sinclair Lodgepole Pool (Figure 2).

SUMMARY

1. The proposed Daly Unit No. 22 will include the Lodgepole formation in seven (7) legal subdivisions (LSD's) and ten (10) wells within the proposed unit lands, which status can be broken down as follows: nine (9) horizontal Lodgepole wells, (all partially within the proposed unit lands, and crossing over into Daly Unit No. 3) and one (1) abandoned vertical well (Figure 1).
2. The original oil in place (OOIP) for the proposed Daly Unit No. 22 is calculated as 1,427 10³m³ (8,974 Mbbl), for an average of 204 10³m³ (1,282 Mbbl) per LSD.
3. Cumulative production in the proposed Daly Unit No. 22 to the end of May 2024 is 58.4 10³m³ (367 Mbbl) of oil. This represents a 4.1% recovery factor of the total OOIP.

4. The first production began in June 1984. In June 2019, the proposed Daly Unit No. 22 reached a peak production of 72.5 m³/d (456 b/d) of oil and 56.3 m³/d (354 b/d) of water, for a water cut of 43.7%. In May 2024, the production was 5.4 m³/d (34.0 b/d) of oil and 9.2 m³/d (57.8 b/d) of water, for a water cut of 62.9%, (Figure 3).
5. The Estimated Ultimate Recovery (EUR) of oil on primary production within the proposed Daly Unit No. 22 using decline analysis is 78.2 10³m³ (492 Mbbbl), with 19.8 10³m³ (124 Mbbbl) remaining as of May 2024. The Estimated Ultimate Recovery Factor (EURF) on primary production would be 5.5% of the total OOIP within the Lodgepole section.
6. With the implementation of a waterflood within the Middle and Lower Daly members of the Lodgepole formation, incremental reserves of 114 10³m³ (719 Mbbbl) are expected while the incremental recovery factor is expected to be 8.0% for a total recovery factor of 13.5% for the entire Lodgepole section.
7. The development plan will be to continue producing the existing wells for a time period before conversion to injection to optimize primary production. Horizontal wells will be converted into water injectors to improve the ultimate recovery within the proposed unit (Figure 4). The timing of the conversions is contingent upon the approval of the unitization and EOR waterflood application. All recently drilled horizontal wells in the proposed Daly Unit No. 22 have been completed using multi-stage hydraulic fracturing.

GEOLOGY

Stratigraphy

The Lodgepole formation (686.5m-787.5m KB in the 100/10-7-10-27 Type Well); directly offsetting the proposed Daly Unit No. 22, conformably overlies the hydrocarbon-bearing Bakken formation. It was deposited in a gently sloping carbonate ramp setting and has been subdivided by Corex into six laterally continuous, shallowing upwards cycles. In ascending order, the sequence consists of two non-reservoir cycles: the Basal Limestone and the Cromer Shale which are overlain by four reservoir cycles: the Crinoidal, Lower Daly, Middle Daly and Flossie Lake. The Lodgepole formation is unconformably overlain by the red silts and shales of the Lower Amaranth (Spearfish / Red Beds) and the anhydrites and shales of the Upper Amaranth which forms the top seal for the hydrocarbon system.

The stratigraphy of the Lodgepole formation is shown on the type well (Appendix 1) (100/10-7-10-27/00) and a structural section which runs through existing vertical well control in and around the proposed unit (see Appendix 2 with Cross-Section from 14-7 to 12-7 to 10-7 all within T10-R27). The majority of original 1950's era verticals were cored, with actual core analysis data within immediate area being minimal. Corex has spent considerable time viewing and studying all offsetting core prior to initiating development within the area. See appropriate Appendices (9, 14, 19 & 24) for a more regional summary of existing offsetting core porosity & permeability data.

Fluid Contacts

Over sixty years of production combined with regional mapping done by Corex has indicated the Lodgepole system oil / water contact is below -290m SS, which is a considerable distance downdip from the proposed Daly Unit No. 22 area and as such does not impact Corex development.

Sedimentology (please refer to referenced Appendices for each cycle within the proposed Unit 22 area.

Starting at the base of the Lodgepole section and working upwards, the first cycle immediately overlying the Bakken formation is the Basal Limestone (from 762m-787.5m KB in the 10-7-10-27 Type Well. (see Appendix 1). The Basal Limestone is a basinal argillaceous limestone with traces of fossil hash and chert nodules. This unit is not prospective and is capped by an argillaceous marker bed.

The next cycle, the Cromer Shale (from 729.5m-762m KB in the 10-7-010-27W1 Type Log, Appendix 1) is a basinal lime-mud consisting of tan to light brown to maroon-colored, occasionally dolomitic limestone with minor anhydrite, grey-green shale and very fine quartz siltstone components. The Cromer Shale is non-reservoir and is capped by a light to medium grey shale.

The overlying Cruikshank Crinoidal (725m-762m KB at the 10-7-010-27W1 type log, Appendix 1), is the first reservoir quality cycle deposited within the Lodgepole formation. The Crinoidal is characterized by bioclastic to biofragmental wackestones to grainstones. Abundant crinoid fragments and shallower-water shell debris has been transported downdip in submarine carbonate channels that have incised the underlying Cromer lime muds.

With minimal actual penetrations of the Crinoidal within the proposed Daly Unit No. 22 area, adjacent well control indicates the Crinoidal isopach ranges from 2 to 6m in thickness in the vicinity of the proposed unitized lands. Using a 6% porosity cutoff the average porosity ranges from 9-14% with permeabilities from 3-34mD. Using the same cutoff for logs as for core, the net pays range from 1 to 20md through and around the proposed Daly Unit No. 22 acreage (Appendices 5 through 9).

The Lower Daly (710.5m-725m KB at the 10-7-010-27W1 type log, Appendix 1) is the next shallowing upwards reservoir cycle and grades from a tan to light brown lime mudstone into grainy bioclastic wackestones to packstones. It is occasionally argillaceous with traces of pyrite and has biofragment rich dolomite. Deposition is in an upslope higher-energy fairway where most of the matrix has been winnowed out, preserving better reservoir both vertically and laterally. The Lower Daly, using a 6% core/log cutoff, has a 12-14% average porosity and an isopach is from 11m to 15m in thickness with pays ranging from 6-8.5m and permeabilities from 3-7mD (Appendices 10 through 14). Historical production has been obtained without fracture stimulation, but oil rates and recoveries have been positively impacted by stimulation.

The Middle Daly (701m-710.5m KB at the 10-7-010-27W1 type log, Appendix 1) is a tan, partially recrystallized very fine to fine slightly dolomitic biofragmental wackestone that grades to a cryptocrystalline mudstone with minor anhydrite and shale. It has a very distinctive lower resistivity profile as result of higher bound water, yet there have been high oil cuts for decades out of this zone. Deposition of this shallowing upward sequence occurred in a more restricted marine environment than the underlying Lower Daly. The Middle Daly isopach ranges from 8m to 9m in thickness over the proposed unit. Using a 6% cutoff the average porosities range from 11-15% and permeabilities from 1-5mD with net pays from 4-5m (Appendices 15 through 19).

Finally, the last reservoir cycle within the Lodgepole is the Flossie Lake (686.5m-701m KB in the 10-7-010-27W1 type log, Appendix 1). The base is dominated by dolomitic limestone that then grades upward into a thinly interbedded dolomite and anhydrite. This is indicative of deposition in the uppermost shallow evaporitic ramp setting. This interval is a light to medium brown, horizontally laminated, microsucrosic dolomite interbedded with dense, white anhydrite beds. The uppermost 3 to 4m of the Flossie Lake is dominated by anhydrite and contains only minor oil stained dolomite. The Flossie isopach is 9 to 10m in thickness. Using a 7% core/log cutoff the net pay is 2 to 3.5m, and permeability ranging from 1-5md while porosities from 11-14% (Appendices 20 through 24). The juxtaposition of reservoir quality dolomites with ductile anhydrite laminae additionally complicates stimulation of this reservoir interval.

Structure

Structure within the proposed Daly Unit No. 22 area primarily reflects deposition on a carbonate ramp-margin with established regional trends dipping down to the southwest into the Williston basin (see Appendices 5, 10, 15 & 20 for structural maps of each reservoir cycle). The proposed Daly Unit 22 area is located on the south-eastern flank of the prolific 10-28 Daly Units area. While structure drops off to approx. -235m within the SE portion of the proposed Unit area; regional Daly water contact remains another 40-50m downdip. Corex has demonstrated the presence of economic oil immediately to the east (E1/2 Sec 7) thus truly derisking the acreage.

Reservoir

Maps for each of the four reservoir units were generated using available openhole logs as well as integration of core data. All maps have been derived and documented in the previous sections, with referenced appendices. Porosity and permeability cutoffs are consistent with previous studies and reflect Corex's detailed reservoir evaluation within the T10-R28W1 area.

OIL IN PLACE, PRODUCTION HISTORY AND ESTIMATED RECOVERY

Original Oil in Place

The Corex internal estimation of original-oil-in-place ("OOIP") for the proposed Daly Unit No. 22 is 1,427 10³m³ (8,974 Mbbbl) for the Lodgepole formation. The values of thickness, porosity,

and water saturation of each LSD for the various reservoir zones are used to calculate the OOIP on an individual LSD basis. Details of the calculations are summarized in Table 1.

Historical Production

Figure 3 shows the production history of the wells within the proposed Daly Unit No. 22. There are a total of ten (10) wells which status can be broken down as follows: nine (9) horizontal Lodgepole wells, (all nine wells are partially within the unit, and crossing over into Daly Unit No. 3) and one (1) abandoned vertical well. Within the proposed unit there is currently no water disposal. All the referenced wells are perforated in the Lodgepole formation.

To the end of May 2024, the proposed Daly Unit No. 22 has produced cumulative volumes of oil of $58.4 \times 10^3 \text{m}^3$ (368 Mbbbl) and water of $129 \times 10^3 \text{m}^3$ (809 Mbbbl). The current recovery factor is 4.1%.

The first production began in June 1984. In June 2019, the proposed Daly Unit No. 22 reached a peak production of $72.5 \text{ m}^3/\text{d}$ (456 b/d) of oil and $56.3 \text{ m}^3/\text{d}$ (354 b/d) of water, for a water cut of 43.7%. In May 2024, the production was $5.4 \text{ m}^3/\text{d}$ (34.0 b/d) of oil and $9.2 \text{ m}^3/\text{d}$ (57.8 b/d) of water, for a water cut of 62.9%, (Figure 3).

Primary Recovery

Table 3 lists the wells within the proposed unit area, together with the cumulative oil production to the end of May 2024 and the estimated ultimate recovery (EUR) estimated using decline analysis. Note: only the production allocated within the proposed unit by the well production bubble has been used in this estimation. The total EUR for the proposed Daly Unit No. 22 is $78.2 \times 10^3 \text{m}^3$ (492 Mbbbl) for a recovery factor of 5.5% of the total OOIP of the Lodgepole section.

Secondary Recovery

Within the Lodgepole formation, the proposed waterflood will target the Middle and Lower Daly members which contain over 70% of the total OOIP. A section model of the Middle and Lower Daly zones was built to estimate the expected recovery from waterflooding. This section model used average reservoir properties and was tuned to match the type production profile of Corex horizontal producers within the Middle Daly member. Under these conditions, an EURF of 6.1% is expected under primary depletion. With horizontal wells converted into injectors, the section model yields an EURF of 16.5%, or an incremental recovery factor of 10.4%. Note, these recovery factors are based on the OOIP of the Middle and Lower Daly zones only and not the entire Lodgepole formation. Therefore, production not deemed to be within the Middle and Lower Daly has also not been included. Additional information on the section model that was scaled to represent Daly Unit No. 22 is included in Appendix XXII.

UNITIZATION

The basis for unitization is to implement a waterflood to increase the ultimate recovery of the OOIP from the proposed project area.

Unit Name

Corex proposes the name of the new unit shall be Daly Unit No. 22.

Unit Operator

Corex will be the Operator for Daly Unit No. 22.

Unitized Zones

The unitized zone to be waterflooded in the Daly Unit No. 22 will be the Lodgepole formation.

Unit Wells

There is a total of ten (10) wells within the proposed unit lands, which status can be broken down as follows: nine (9) horizontal Lodgepole wells, (all nine wells are partially within the unit, and crossing over into Daly Unit No. 3) and one (1) abandoned vertical well. All the wells in the proposed Daly Unit No. 22 are outlined in Table 2.

Unit Lands

Daly Unit No. 22 will consist of seven (7) LSD's which will include the W¹/₂ of Section 7 of Township 10 Range 27W1, less LSD 4. Therefore, the unit lands will include LSD's 3, 5, 6, 11, 12, 13 and 14 of Section 7 of Township 10 Range 27W1. The lands included in the 40-acre tracts are outlined in Appendix XXIII.

Tract Factors

The proposed Daly Unit No. 22 will consist of seven (7) tracts based on remaining OOIP using maps created internally by Corex per LSD, as of May 2024, with the production from the horizontal wells being divided according to the existing production allocation agreement. The calculation of the tract factors is outlined in Table 1.

Working Interest Owners

Appendix XXIII outlines the working interest for each recommended tract within the proposed Daly Unit No. 22. Corex will have a 100% WI across all tracts.

WATERFLOOD DEVELOPMENT

The objective of implementing a waterflood is to provide pressure support and improve recovery. The Lodgepole formation is relatively shallow with undersaturated oil having low solution gas-oil ratios and as such, there is not much drive energy within the system. Corex believes additional energy is required to improve the recovery. Waterflooding will enhance the recovery by providing pressure support, as well as displacing the oil from the injectors towards the producers.

Rock and Fluid Properties

Rock and fluid properties for the Lodgepole formation are summarized in Table 4. These properties were estimated using standard correlations in the literature as well as existing oil analysis and PVT data.

Using Corex's internal database in the Lodgepole, the fracture gradient for the Lodgepole formation in the Daly area is estimated to be 22 kPa/m. Based on the average fracture gradient a surface fracturing pressure of 8,200 kPa is anticipated. The surrounding units have maximum allowable injection pressures (MAP) ranging from 7,500 kPa to 8,000 kPa, which Corex feels is appropriate for the proposed Daly Unit No. 22.

Estimated Recovery

Using the results from the Daly section model, incremental reserves of $114 \times 10^3 \text{m}^3$ (719 Mbbbl) are expected. Based on the total OOIP for the Lodgepole formation, the incremental recovery factor is expected to be 8.0% for an overall recovery factor of 13.5%.

Economic Limit

The economic limit will be when the net oil rate and net oil price revenue stream becomes less than the current producing operating costs. Based on current price forecasts, the economic limit for the project would be $1 \text{ m}^3/\text{d}$.

Source of Injection Water

The wells in Section 07-10-27W1 are flowlined to the 2-11-10-28 Daly Unit No. 3 battery. The adjacent unit has been upgraded recently for waterflood (including FWKO, filter skids, pumps). Corex have ensured we have a spare flowline in the ROW, and/or one of the two flowlines has been installed for high pressure with intent to be converted at a later date. In Daly Unit No. 3, the source water is produced Lodgepole water, and surface piping will be changed to accommodate the Daly Unit No. 22 wells.

The waterflood injection facilities consist of a free water knockout on the inlet stream, water tanks to filter out any large solids or emulsions from the produced water, two bag type filter banks to further filter out any solids down to 1 micron, and a new injection pump. No new equipment will

be required for this application area, with the exception to the injection wellhead tie-ins and flowlines.

The injector wells will be equipped with surface injection flowrate and pressure monitoring with choke valves to control wellhead pressure and injection rates (Figure 7). The wells will be evaluated for installation of a downhole injection control device (ICD) system to ensure an even distribution of injection fluid across the horizontal wellbore (representation shown in Figure 5). The water injection pipeline system will be monitored for leak detection using pressure variance and volume balancing. The corrosion control program outlining the planned system design and operational practices to prevent corrosion is located in Figure 7.

Operating Strategy

Corex's plan is to have alternating producer-injector patterns within the proposed Daly Unit No. 22 and the proposed injection scheme can be seen in Figure 4.

Injection rates are expected to be in the range of 50 m³/d to 120 m³/d, per well, subject to a maximum injection pressure of 7,400 kPa at the well head. This maximum pressure is based on a fracture pressure of 8,200 kPa and a safety factor of 90%. The surrounding units have maximum allowable injection pressures (MAP) ranging from 7,500 kPa to 8,000 kPa, which Corex feels is appropriate for the proposed Daly Unit No. 22.

Initially, injection will target a monthly voidage replacement ratio (VRR) between 1.25 and 1.75. This over-injection will serve to replace the existing voidage within the proposed unit area. Once a cumulative VRR of one is attained, the injection rate will be scaled back to maintain the VRR at one, both on a monthly and a cumulative basis. All producers will be kept at pump-off condition.

Pressure

The initial pressure is estimated to be between 7,800 kPa and 8,100 kPa. This is based on the depth of the Middle Daly zone and a static gradient ranging between 10.5 kPa/m and 10.8 kPa/m. To this date no pressure measurements have been taken within the proposed unit. Historically, due to the low permeability of the rock, pressure surveys in the area have been inaccurate and unreliable. Due to the cumulative production to date the current pressure is below the initial reservoir pressure, it is projected that the pressure will continue to decrease from primary depletion and the recent drilling of new producing wells. With low solution-gas oil, another drive mechanism will need to be implemented to improve the recovery within the proposed unit.

Waterflooding will help to re-pressurize and add energy to the reservoir. During the initial over-injection period, the reservoir pressure is expected to increase from the current level. Once the cumulative VRR reaches one, a monthly VRR of one will be maintained. At the stage of the first conversion the reservoir pressure is expected to be below its initial value. Prior to injection Corex will endeavor to record reservoir pressures within the proposed unit and continue to do so upon

implementing a secondary recovery scheme, if it is feasible to record pressure and that the pressures recorded will be considered accurate.

Waterflood Surveillance

Waterflood response within the proposed Daly Unit No. 22 will be closely monitored with the following:

- Perform regular production well testing to monitor fluid rate and water cut to watch for waterflood response.
- Compare daily injection rates and injection pressures to targets.
- Monitor monthly and cumulative voidage replacement ratio by pattern and overall unit.
- Evaluate Hall plots to monitor any changes in injectivity.
- Send new injection targets to the field on a regular basis.

Project Schedule

With the success of the recently drilled horizontal wells within application area, the proposed Daly Unit No. 22 is now fully developed. After a period of primary recovery Corex intends to convert several wells to injection in an alternating producer-injector waterflood scheme to support the other existing wells and implement a waterflood.

Conversion of the horizontal producers into injection wells is expected to start in Q1 2025. This schedule is contingent upon the approval of the Unitization and Waterflood application, as well as the various stake holders coming to agreement.

NOTIFICATIONS

In accordance with the regulations, Corex will deliver notification to all surface and mineral owners of the proposed EOR project of Daly Unit No. 22. Copies of the notices and proof of service to all affected owners will be forwarded to the Petroleum Branch, when available, to complete the Daly Unit No. 22 Application.

Should you have any comments and/or questions regarding this application, please contact Peter Parkinson at (403) 718-6371; peterp@corexresources.ca, or Lindsey Synder, Engineering at (403) 650-1973; lindseys@corexresources.ca.

Regards,
COREX RESOURCES LTD.

David McGuinness
Executive Vice President, Land

Table 1 – Summary of Original Oil In Place and Tract Factor Calculations

Daly Unit No. 22

Lodgepole Unit

Tract LSD	Tract Weighting	Total	03-07 03-07-010-27W1	05-07 05-07-010-27W1	06-07 06-07-010-27W1	11-07* 11-07-010-27W1
Tract Factor		100.000000000%	13.373960949%	13.378590887%	13.414965820%	14.929792354%
Flossie Lake						
Area (ac)		280	40.0	40.0	40.0	40.0
h (m)			1.5	1.5	1.5	2.5
Vb (ac-ft)		1,903	197	197	197	328
phi			12.0%	12.0%	12.0%	14.0%
Sw			20%	20%	20%	20%
HCPV			0.144	0.144	0.144	0.280
OOIP (Mbbbls)		1,580	147	147	147	285
OOIP (Mstb)		1,477	137	137	137	266
OOIP (10 ³ m ³)		235	22	22	22	42
Middle Daly (Green)						
Area (ac)		280	40.0	40.0	40.0	40.0
h (m)			4.0	4.0	4.0	4.8
Vb (ac-ft)		4,068	525	525	525	623
phi			13.0%	13.0%	13.0%	12.0%
Sw			20%	20%	20%	20%
HCPV		3	0.416	0.416	0.416	0.456
OOIP (Mbbbls)		3,128	424	424	424	464
OOIP (Mstb)		2,923	396	396	396	434
OOIP (10 ³ m ³)		465	63	63	63	69
Lower Daly (Purple)						
Area (ac)		280	40.0	40.0	40.0	40.0
h (m)			6.0	6.0	6.0	7.0
Vb (ac-ft)		6,037	787	787	787	919
phi			12.0%	12.0%	12.0%	11.0%
Sw			20%	20%	20%	20%
HCPV		4	0.576	0.576	0.576	0.616
OOIP (Mbbbls)		4,268	586	586	586	627
OOIP (Mstb)		3,989	548	548	548	586
OOIP (10 ³ m ³)		634	87	87	87	93
Crinoid						
Area (ac)		280	40.0	40.0	40.0	40.0
h (m)			1.5	1.5	1.5	1.0
Vb (ac-ft)		1,115	197	197	197	131
phi			10.0%	10.0%	10.0%	8.0%
Sw			20%	20%	20%	20%
HCPV		1	0.120	0.120	0.120	0.064
OOIP (Mbbbls)		627	122	122	122	65
OOIP (Mstb)		586	114	114	114	61
OOIP (10 ³ m ³)		93	18	18	18	10
Total Lodgepole						
Total OOIP (Mstb)		8,974	1,195	1,195	1,195	1,347
Total OOIP (10 ³ m ³)		1,427	190	190	190	214
Cumulative Oil (Mstb)		368	44.0	43.6	40.5	62.3
OOIP-Cum Prd (Mstb)	100%	8,607	1,151	1,151	1,155	1,285
Well 1						
Factor			100/15-07-010-27W1/00 10.28%	102/02-12-010-28W1/00 2.33%	100/15-07-010-27W1/00 11.13%	100/15-07-010-27W1/00 11.07%
Cumulative Oil (Mstb)			48.4	73.7	48.4	48.4
Well 2						
Factor			102/01-12-010-28W1/00 28.27%	103/07-12-010-28W1/00 24.40%	102/02-12-010-28W1/00 1.53%	104/10-12-010-28W1/00 23.78%
Cumulative Oil (Mstb)			67.6	146.7	73.7	109.6
Well 3						
Factor			102/02-12-010-28W1/00 26.55%	102/07-12-010-28W1/00 30.27%	103/07-12-010-28W1/00 21.69%	103/10-12-010-28W1/00 25.60%
Cumulative Oil (Mstb)			73.7	20.1	146.7	119.9
Well 4						
Factor			103/07-12-010-28W1/00 0.23%		102/07-12-010-28W1/00 10.57%	104/15-12-010-28W1/00 0.23%
Cumulative Oil (Mstb)			146.7		20.1	87.6

Table 1 – Summary of Original Oil In Place and Tract Factor Calculations (Continued)

Daly Unit No. 22					
Lodgepole Unit					
Tract	Tract	Total	12-07	13-07	14-07
LSD	Weighting		12-07-010-27W1	13-07-010-27W1	14-07-010-27W1
Tract Factor		100.000000000%	14.804870021%	15.052606692%	15.045213277%
Flossie Lake					
Area (ac)		280	40.0	40.0	40.0
h (m)			2.5	2.5	2.5
Vb (ac-ft)		1,903	328	328	328
phi			14.0%	14.0%	14.0%
Sw			20%	20%	20%
HCPV			0.280	0.280	0.280
OOIP (Mbbbls)		1,580	285	285	285
OOIP (Mstb)		1,477	266	266	266
OOIP (10 ³ m ³)		235	42	42	42
Middle Daly (Green)					
Area (ac)		280	40.0	40.0	40.0
h (m)			4.8	4.8	4.8
Vb (ac-ft)		4,068	623	623	623
phi			12.0%	12.0%	12.0%
Sw			20%	20%	20%
HCPV		3	0.456	0.456	0.456
OOIP (Mbbbls)		3,128	464	464	464
OOIP (Mstb)		2,923	434	434	434
OOIP (10 ³ m ³)		465	69	69	69
Lower Daly (Purple)					
Area (ac)		280	40.0	40.0	40.0
h (m)			7.0	7.0	7.0
Vb (ac-ft)		6,037	919	919	919
phi			11.0%	11.0%	11.0%
Sw			20%	20%	20%
HCPV		4	0.616	0.616	0.616
OOIP (Mbbbls)		4,268	627	627	627
OOIP (Mstb)		3,989	586	586	586
OOIP (10 ³ m ³)		634	93	93	93
Crinoid					
Area (ac)		280	40.0	40.0	40.0
h (m)			1.0	1.0	1.0
Vb (ac-ft)		1,115	131	131	131
phi			8.0%	8.0%	8.0%
Sw			20%	20%	20%
HCPV		1	0.064	0.064	0.064
OOIP (Mbbbls)		627	65	65	65
OOIP (Mstb)		586	61	61	61
OOIP (10 ³ m ³)		93	10	10	10
Total Lodgepole					
Total OOIP (Mstb)		8,974	1,347	1,347	1,347
Total OOIP (10 ³ m ³)		1,427	214	214	214
Cumulative Oil (Mstb)		368	73.1	51.8	52.4
OOIP-Cum Prd (Mstb)	100%	8,607	1,274	1,296	1,295
Well 1					
Factor			100/12-07-010-27W1/00	103/10-12-010-28W1/00	100/15-07-010-27W1/00
			100.00%	1.24%	11.31%
Cumulative Oil (Mstb)			9.1	119.9	48.4
Well 2					
Factor			104/10-12-010-28W1/00	104/15-12-010-28W1/00	103/10-12-010-28W1/00
			26.03%	31.56%	1.64%
Cumulative Oil (Mstb)			109.6	87.6	119.9
Well 3					
Factor			103/10-12-010-28W1/00	103/15-12-010-28W1/00	104/15-12-010-28W1/00
			29.53%	29.44%	27.44%
Cumulative Oil (Mstb)			119.9	76.8	87.6
Well 4					
Factor					103/15-12-010-28W1/00
					27.22%
Cumulative Oil (Mstb)					76.8

Table 2 – Well List – Status

UWI Well ID	Prod./Inject. Formation	First Prod. YYYY/MM	Last Prod. YYYY/MM	Type
100/12-07-010-27W1/00	Mlodgepl	1984-06-01	2013-03-31	Vertical
100/15-07-010-27W1/00	Mlodgepl	2020-11-01	2024-05-31	Horizontal
102/01-12-010-28W1/00	Mlodgepl	2018-02-01	2024-05-31	Horizontal
102/02-12-010-28W1/00	Mlodgepl	2018-02-01	2024-05-31	Horizontal
102/07-12-010-28W1/00	Mlodgepl	2018-08-01	2024-05-31	Horizontal
103/07-12-010-28W1/00	Mlodgepl	2018-08-01	2024-05-31	Horizontal
103/10-12-010-28W1/00	Mlodgepl	2019-03-01	2024-05-31	Horizontal
104/10-12-010-28W1/00	Mlodgepl	2019-05-01	2024-05-31	Horizontal
103/15-12-010-28W1/00	Mlodgepl	2019-03-01	2024-05-31	Horizontal

Table 3 – Cumulative Oil Production and Estimated Ultimate Recovery

UWI Well ID	Type	Cumulative Oil (Mbbbl)	EUR (Mbbbl)
100/12-07-010-27W1/00	Vertical	9.130	9.130
100/15-07-010-27W1/00	Horizontal	21.200	29.975
102/01-12-010-28W1/00	Horizontal	19.101	32.921
102/02-12-010-28W1/00	Horizontal	22.412	25.616
102/07-12-010-28W1/00	Horizontal	8.199	13.720
103/07-12-010-28W1/00	Horizontal	67.972	85.845
103/10-12-010-28W1/00	Horizontal	69.548	96.222
104/10-12-010-28W1/00	Horizontal	54.612	74.783
103/15-12-010-28W1/00	Horizontal	43.495	49.092
104/15-12-010-28W1/00	Horizontal	51.918	74.679

Note: Cumulative Oil and EUR's for wells only partially within the Proposed Daly Unit No. 22 have only used the production allocated to the proposed unit area from the designated production bubble. What is displayed is not the well's total production volumes.

Table 4 – Summary of Rock and Fluid Properties

Proposed Daly Unit No. 22		
Rock and Fluid Properties Lodgepole Formation		
Formation Pressure	kPa	7,800
Oil Gravity	°API	35
Solution Gas-Oil Ratio	m ³ /m ³	15
Oil Formation Volume Factor	Rm ³ /Sm ³	1.07
Average Porosity	Fraction	0.11
Average Air Permeability	mD	1.5

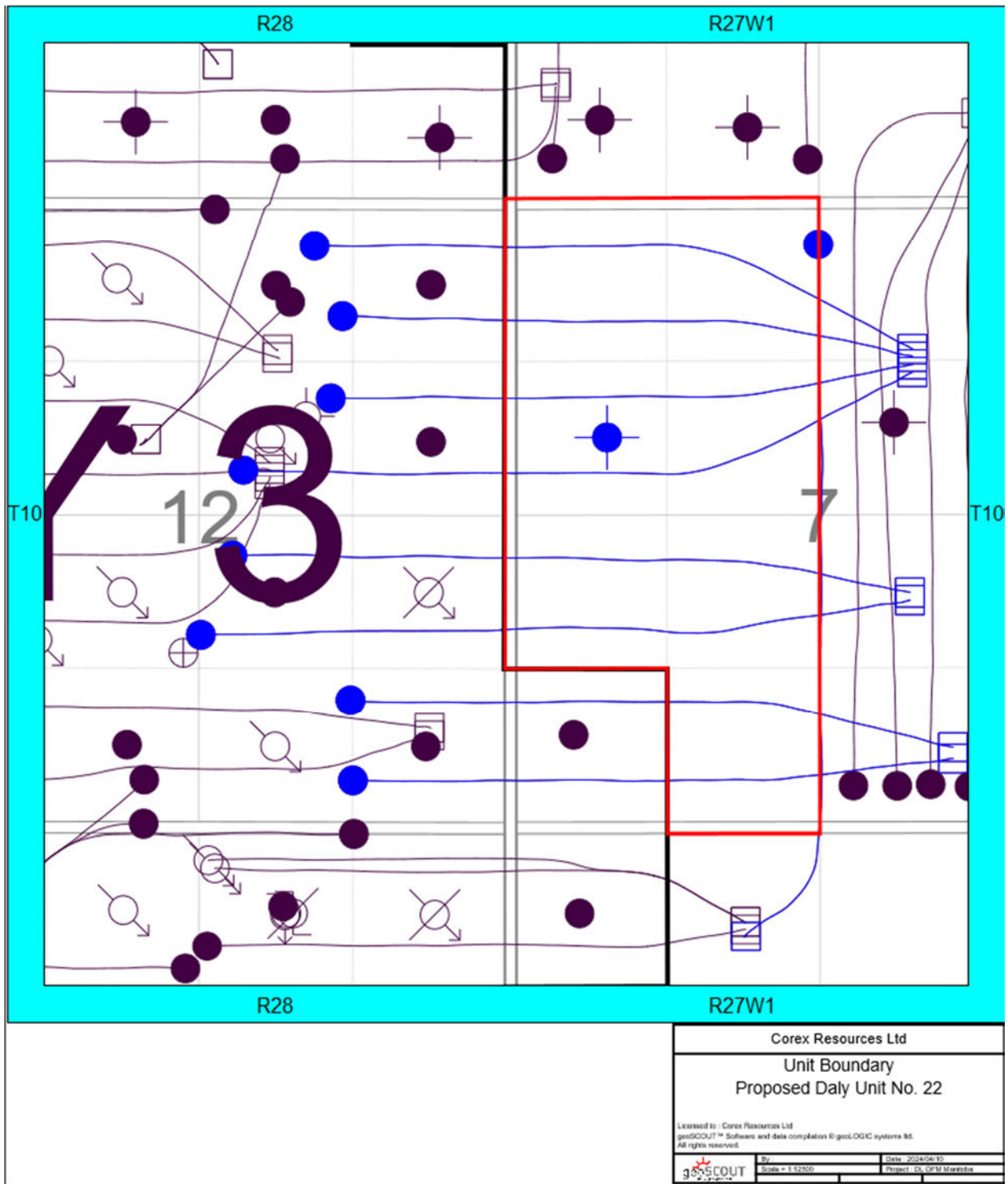


Figure 1 – Location of Proposed Daly Unit No. 22, Red Outline

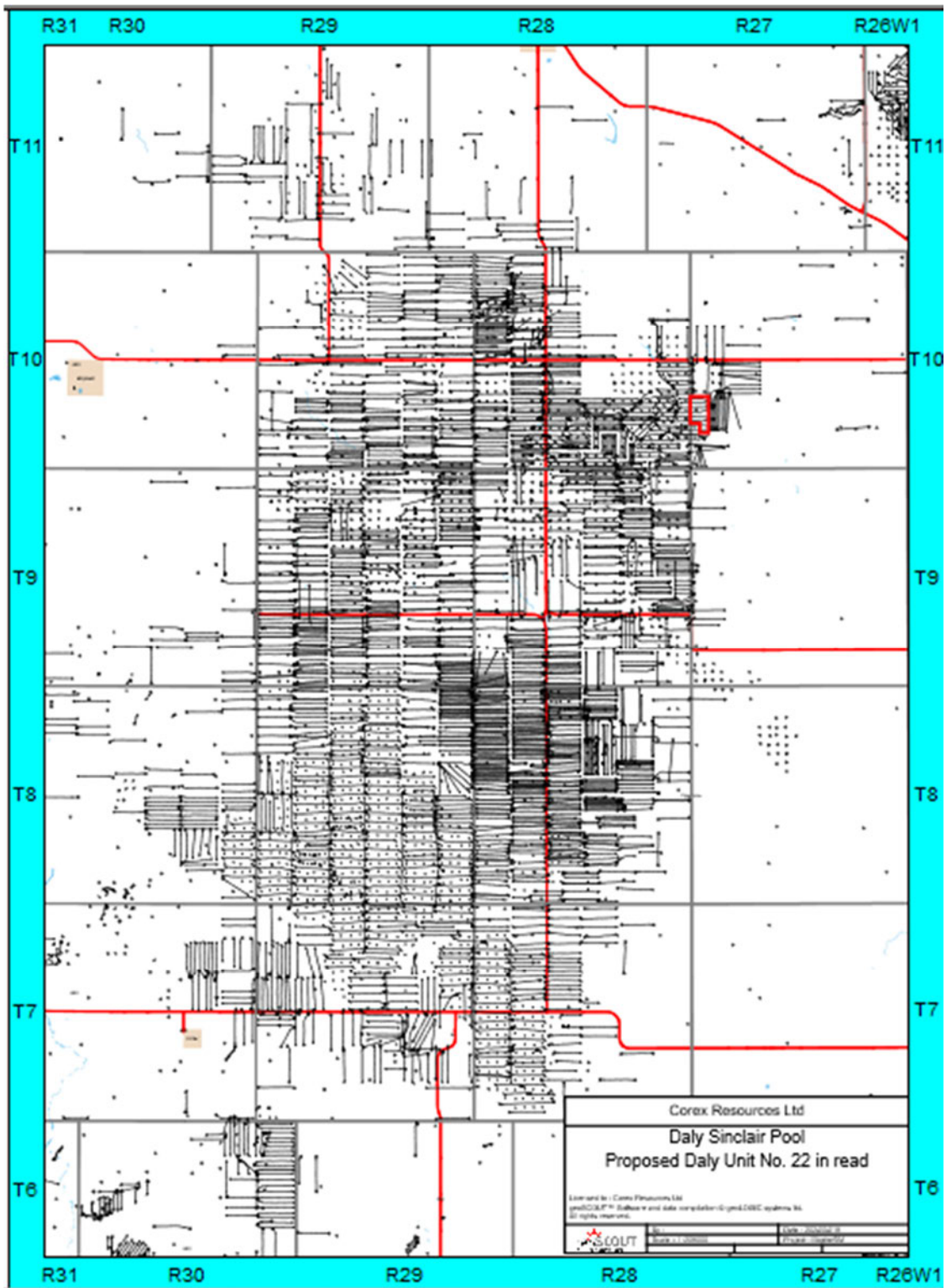


Figure 2 – Location of Proposed Daly Unit No. 22 within the Daly Sinclair Field

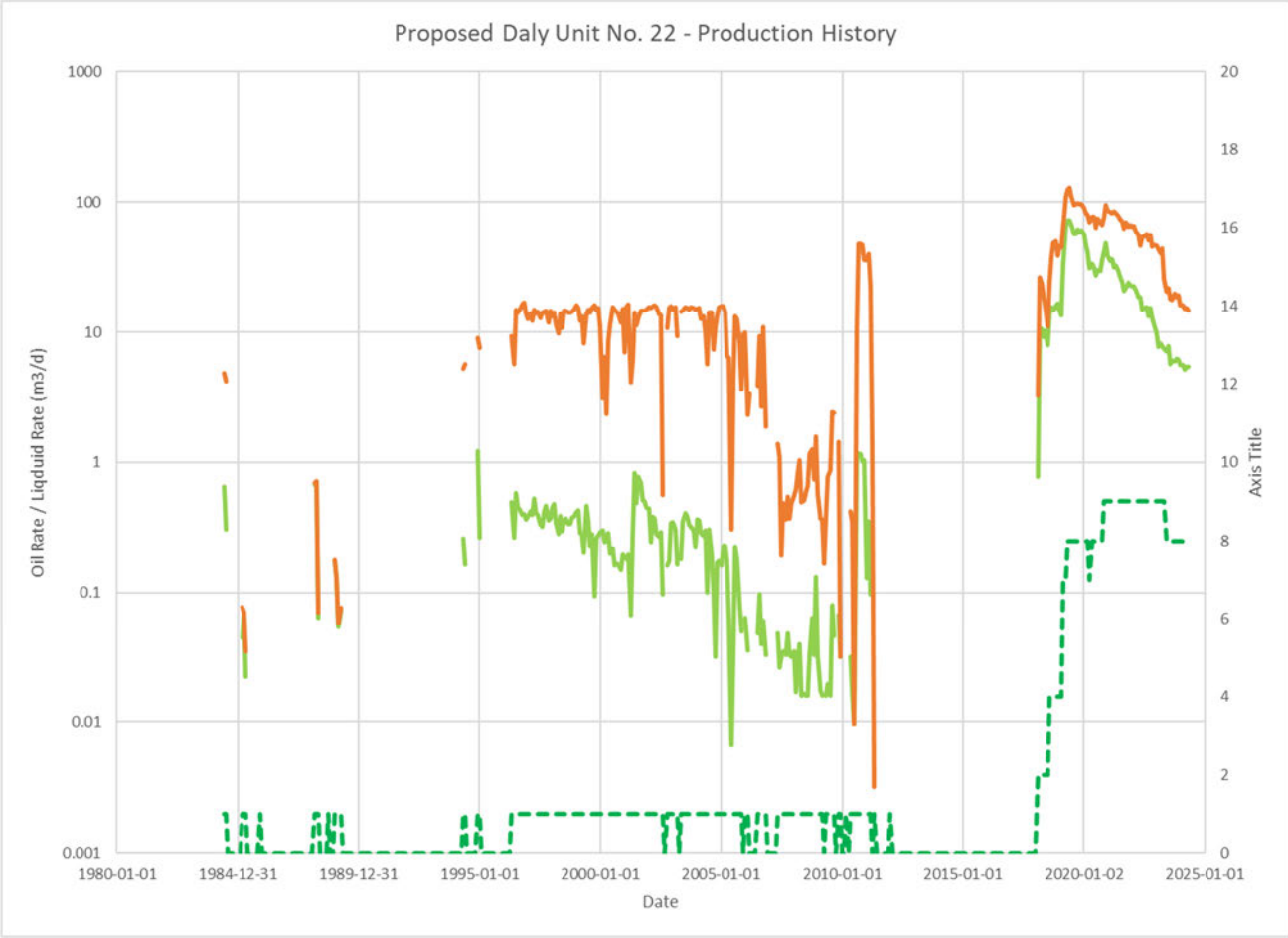


Figure 3 – Production History of Wells within Proposed Daly Unit No. 22

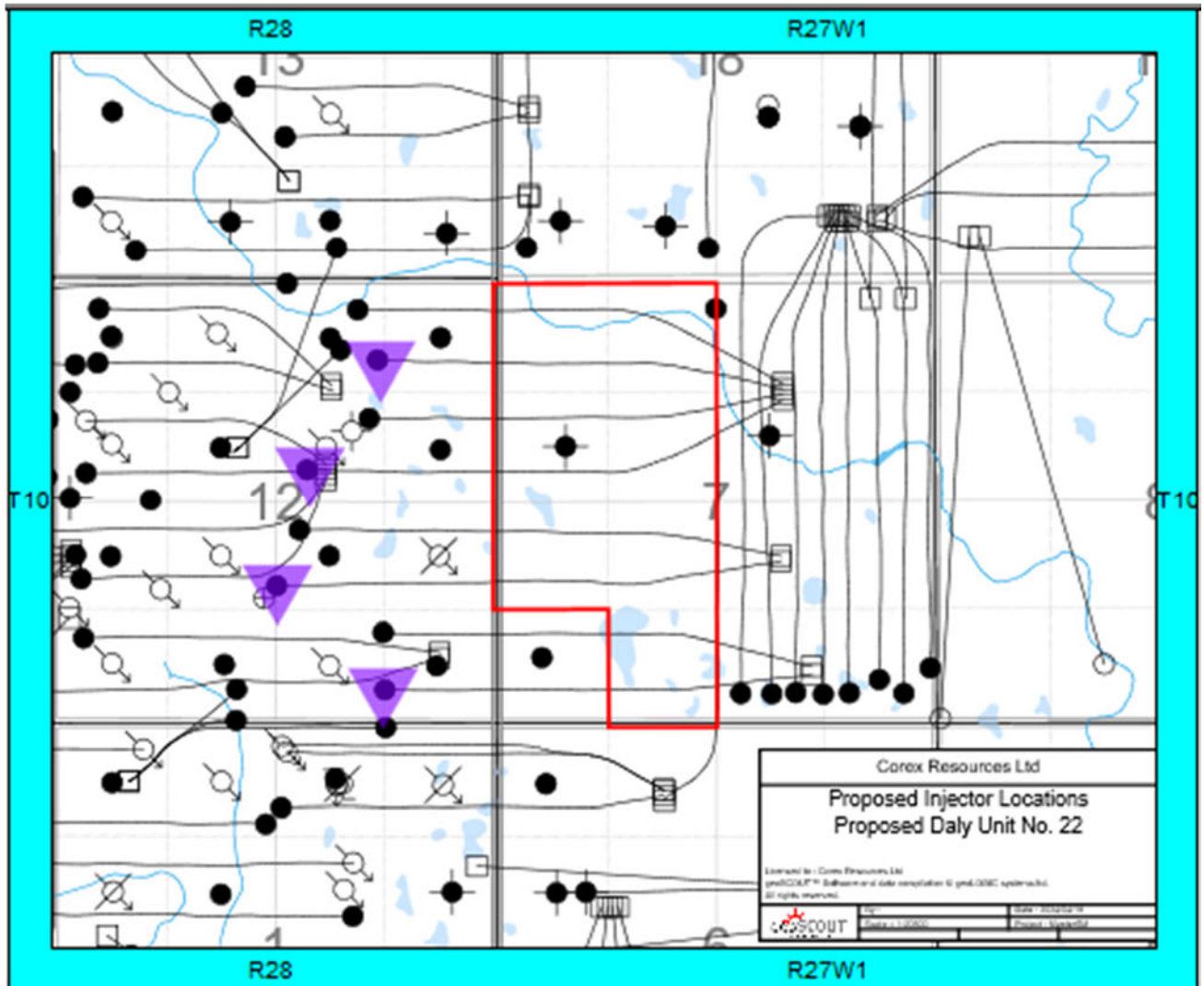


Figure 4 – Proposed Injector Locations

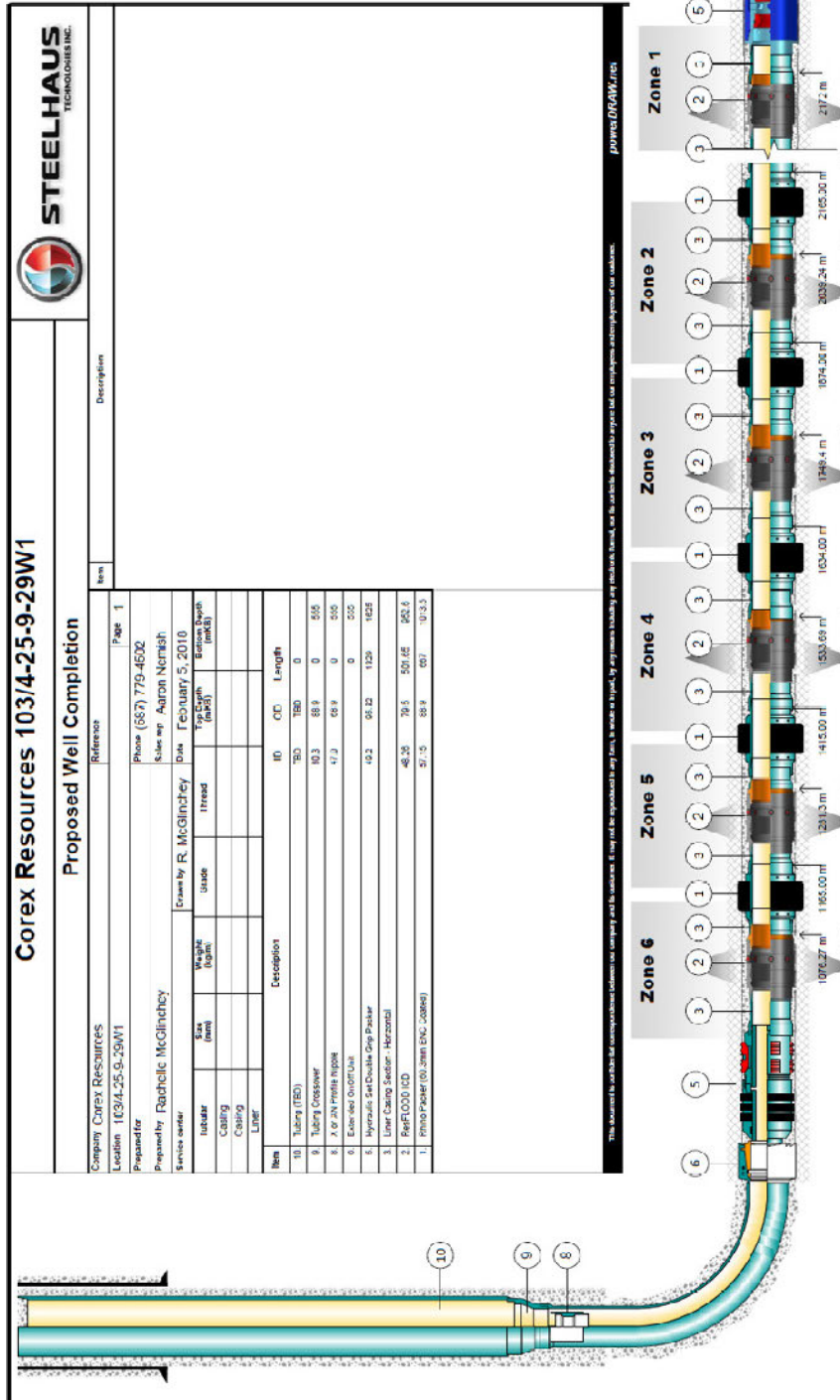
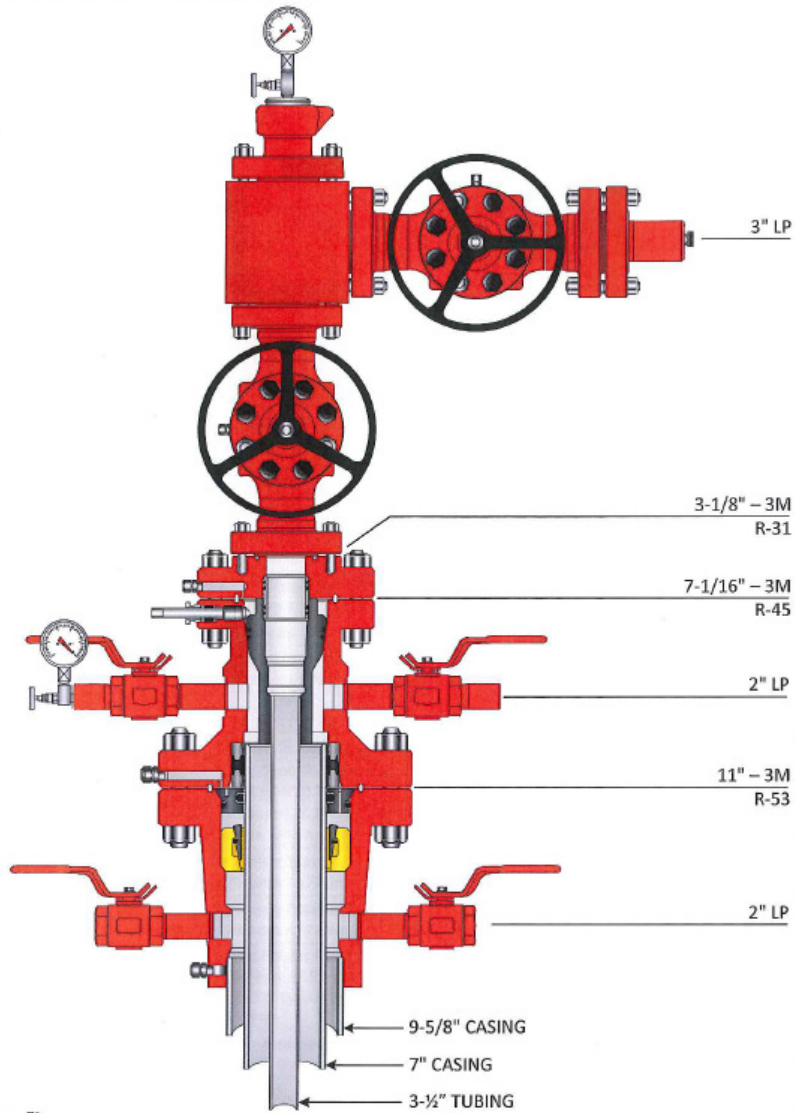


Figure 5 – Wellbore Schematic for Injector Nozzle System

All tubing will be either plastic lined (polycore) or metallic coated for corrosion, with an ID of 60.3mm

NOTE: THIS DRAWING IS NOT TO SCALE. THE DIMENSIONS REFLECTED ON THIS DRAWING ARE ESTIMATED DIMENSIONS AND ARE FOR REFERENCE ONLY.

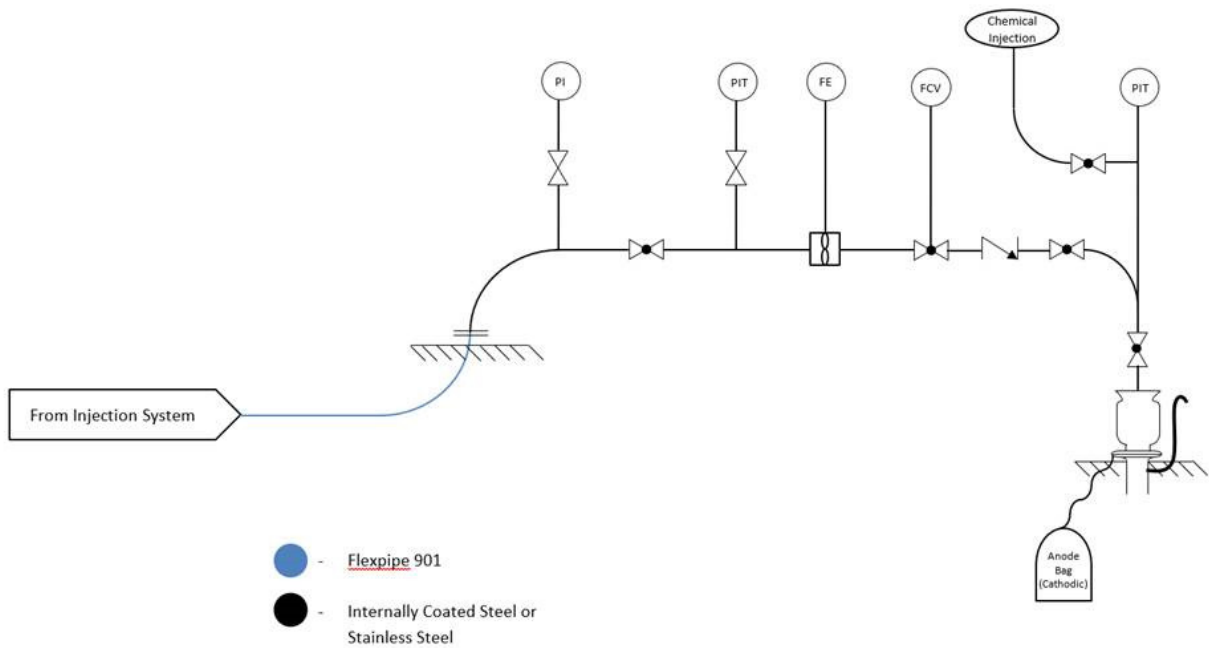


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Customer: COREX RESOURCES	DWG No: CQD-7164V	Quote No.: CW-131216-CR
Project Name: 3-1/2" - 3000 PSI INJECTOR WELLHEAD	Date: 12/18/2013	Drawn By: M.GRAVELY

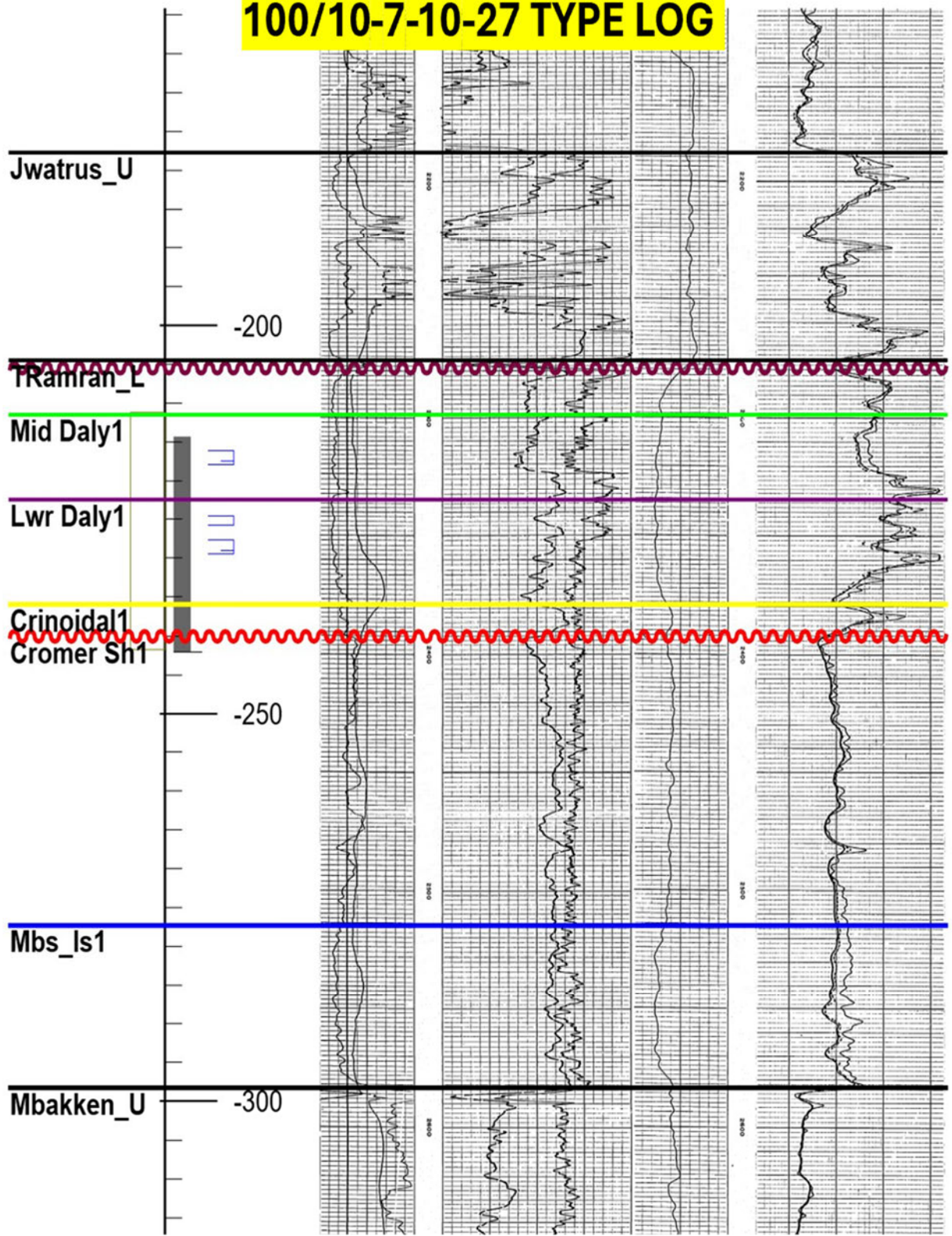
Figure 6 – Wellhead Design



All injection pipelines will have corrosion inhibitor injected at the 2-11 facility, which will carry through to the wellhead for downhole corrosion control (wellhead injection points will be available as needed). Both corrosion inhibitor and scale inhibitor are injected upstream at the producing source wells to protect the pipelines and the injection facilities at the battery. Wellbore casing will have cathodic protection installed for corrosion control. The PIT and FE on the diagram will be setup through a monitoring system in addition to one at the injection plant to monitor pipelines for any leaks through pressure and flow balance. Alarm points will be setup with callouts.

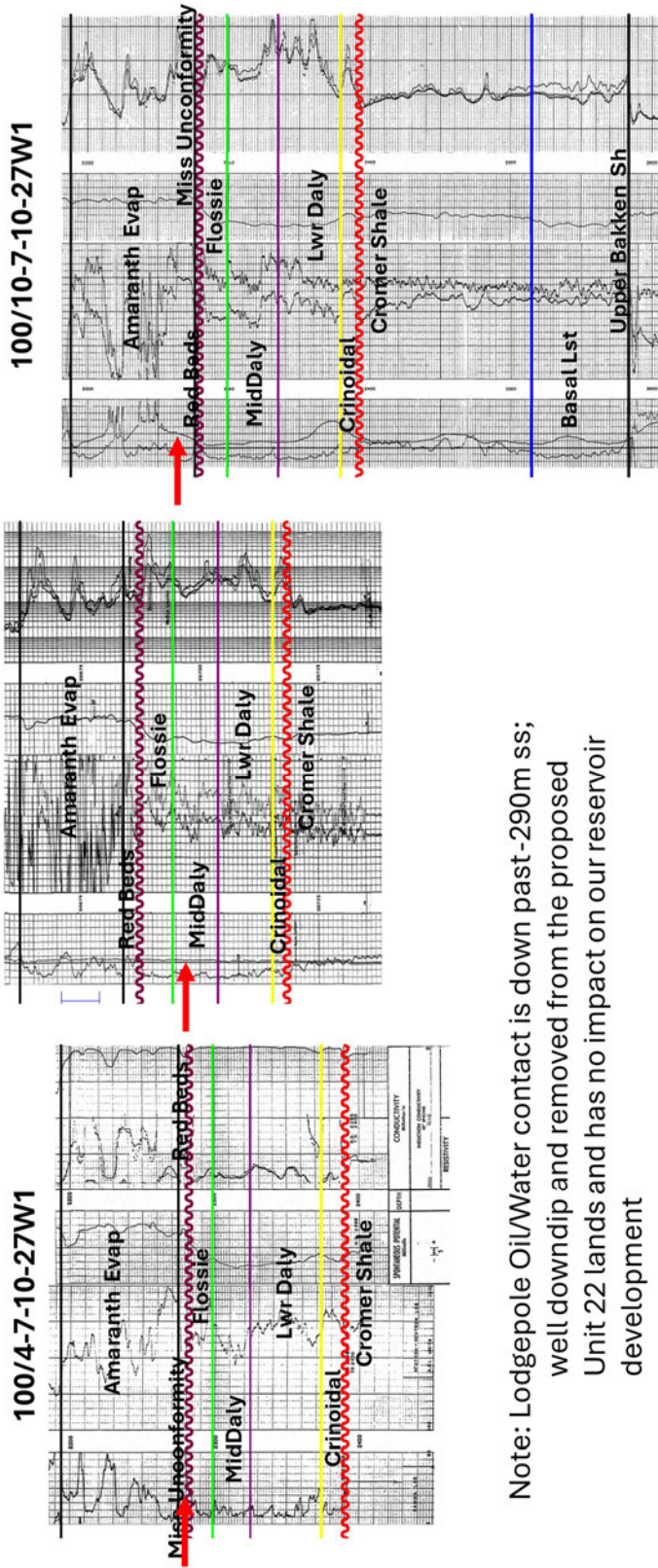
Figure 7 – Corrosion Control System & Monitoring

100/10-7-10-27 TYPE LOG



Appendix 1

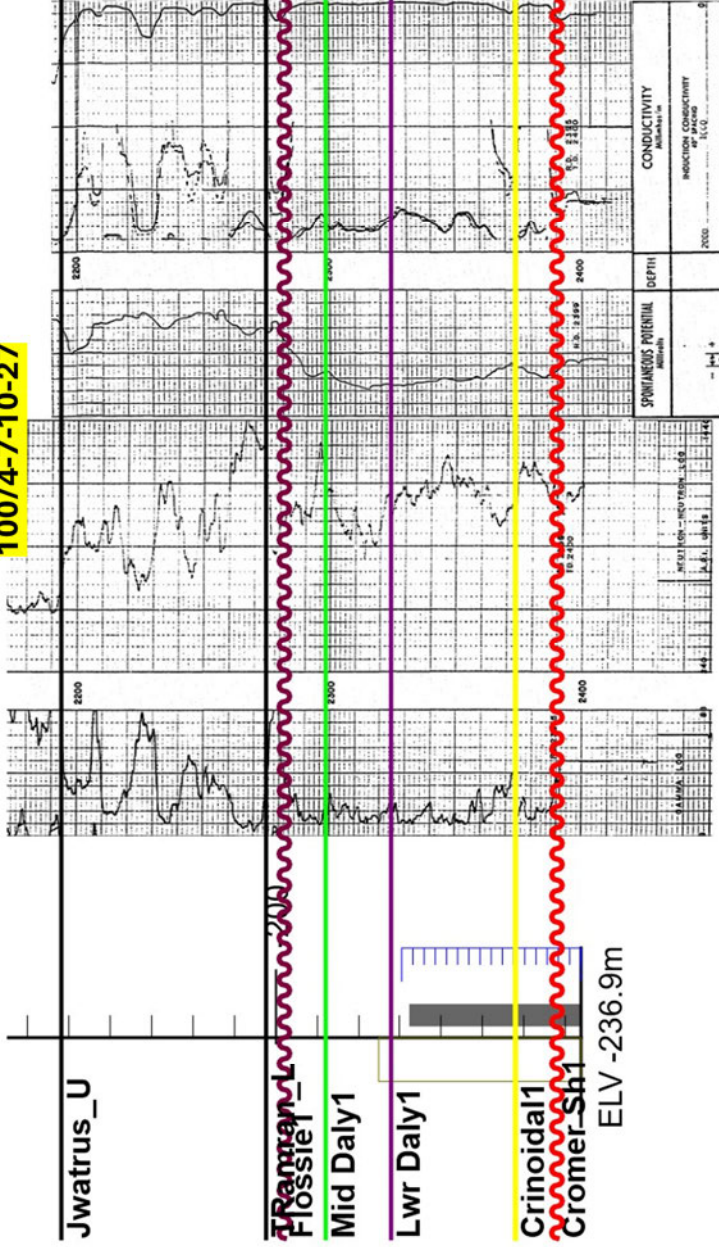
Daly Unit 22 Lodgepole Cross-Section

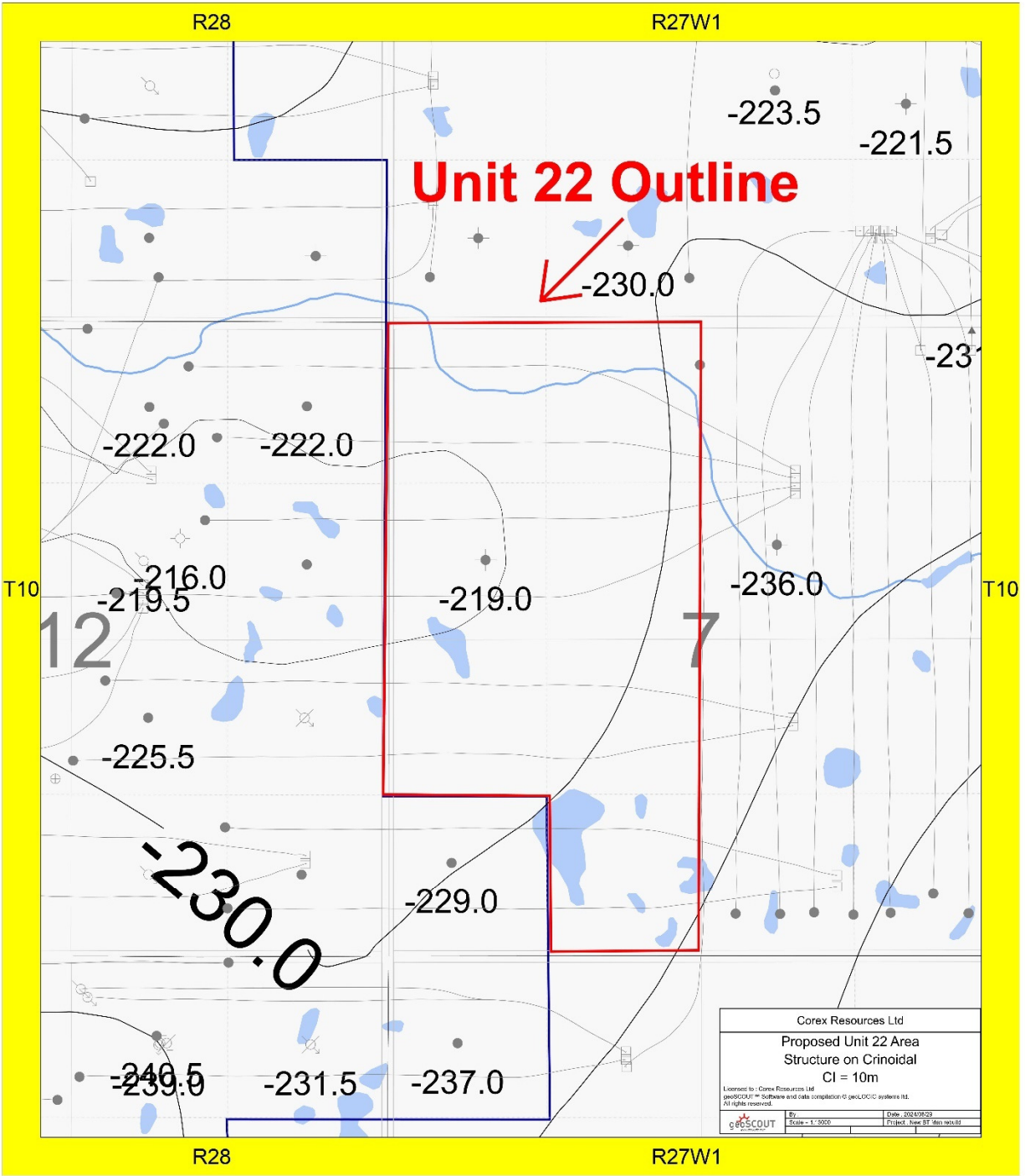


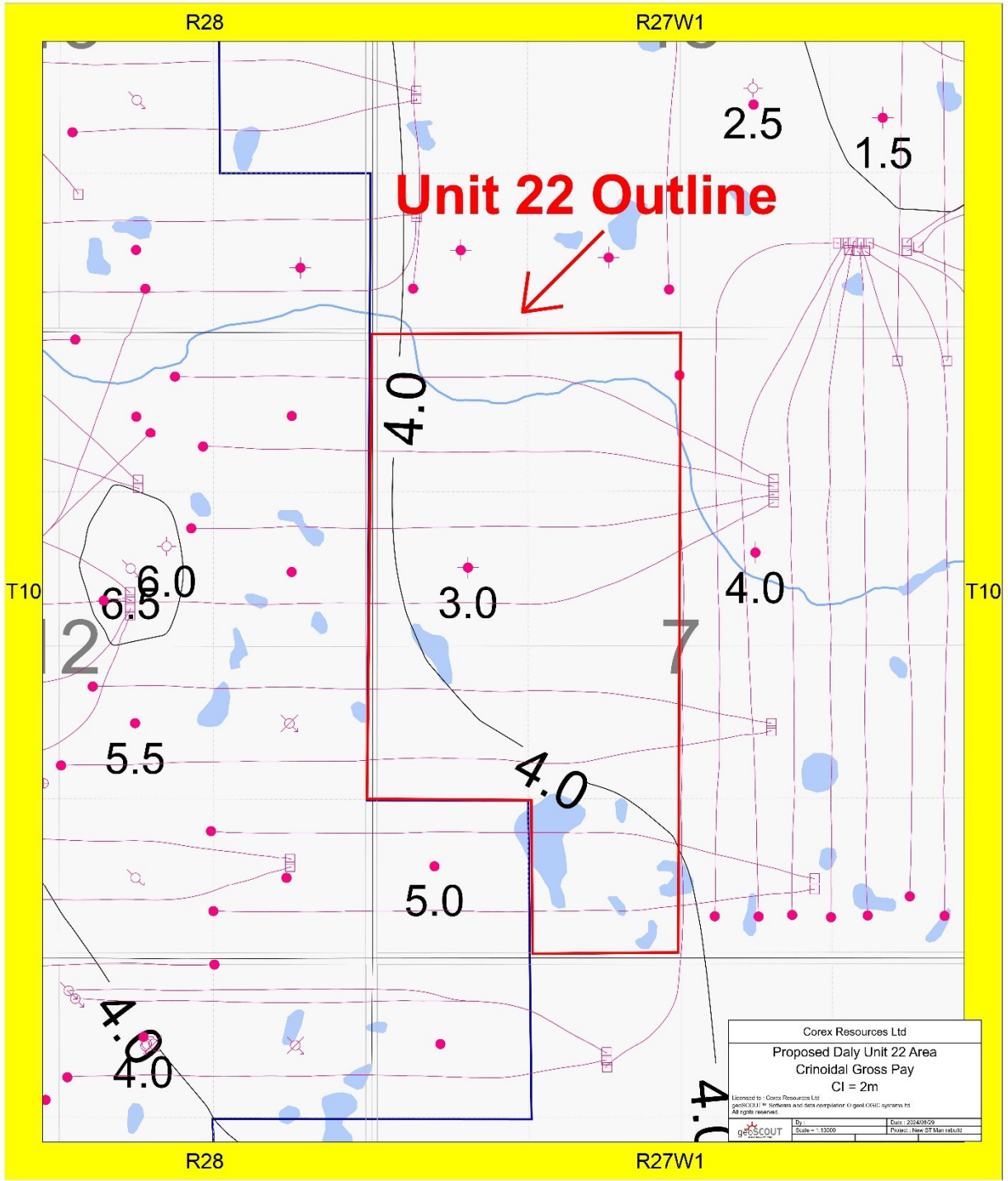
Note: Lodgepole Oil/Water contact is down past -290m ss;
 well downdip and removed from the proposed
 Unit 22 lands and has no impact on our reservoir
 development

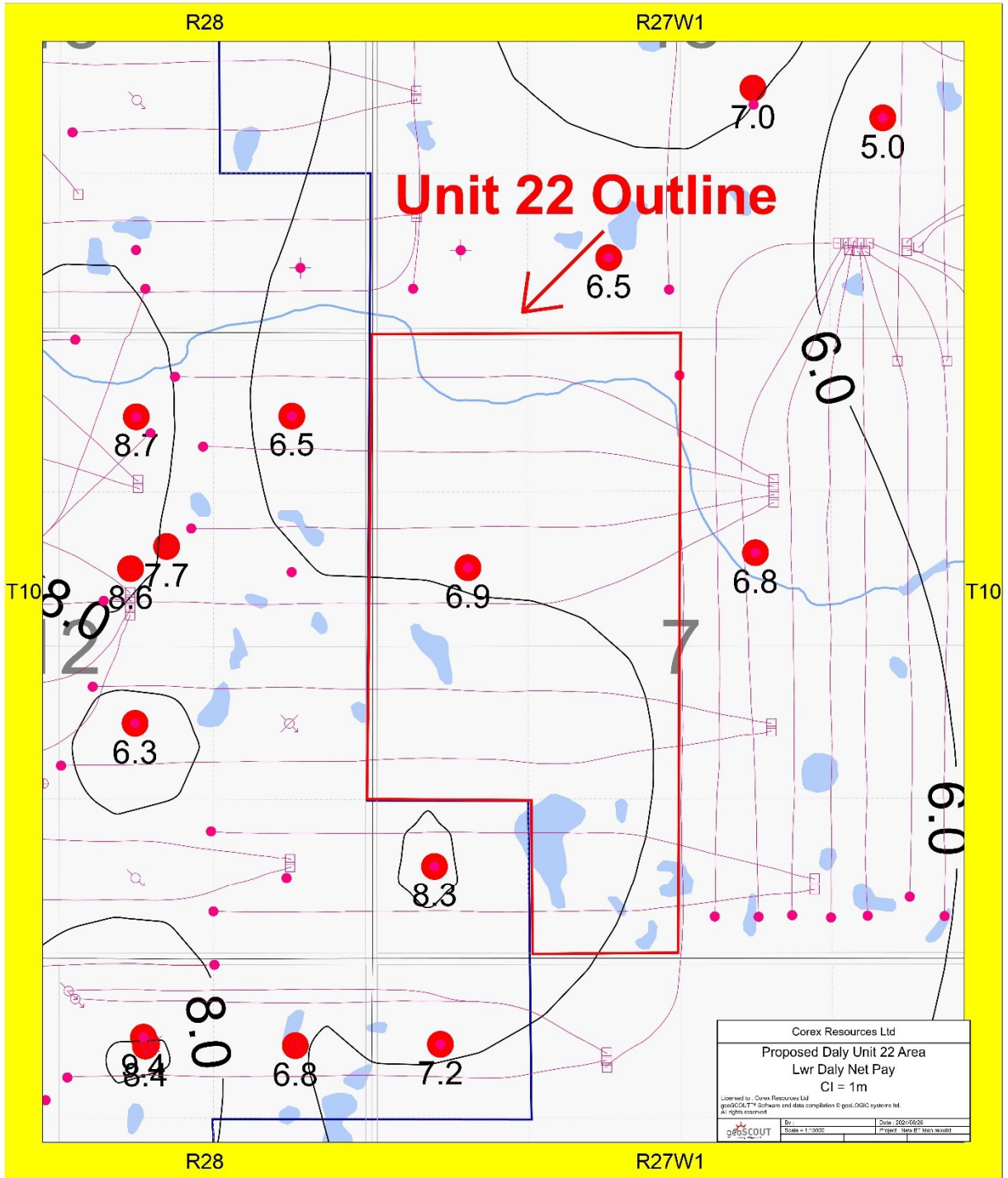
Note: Cross section is Structural X-Section → -200m Datum

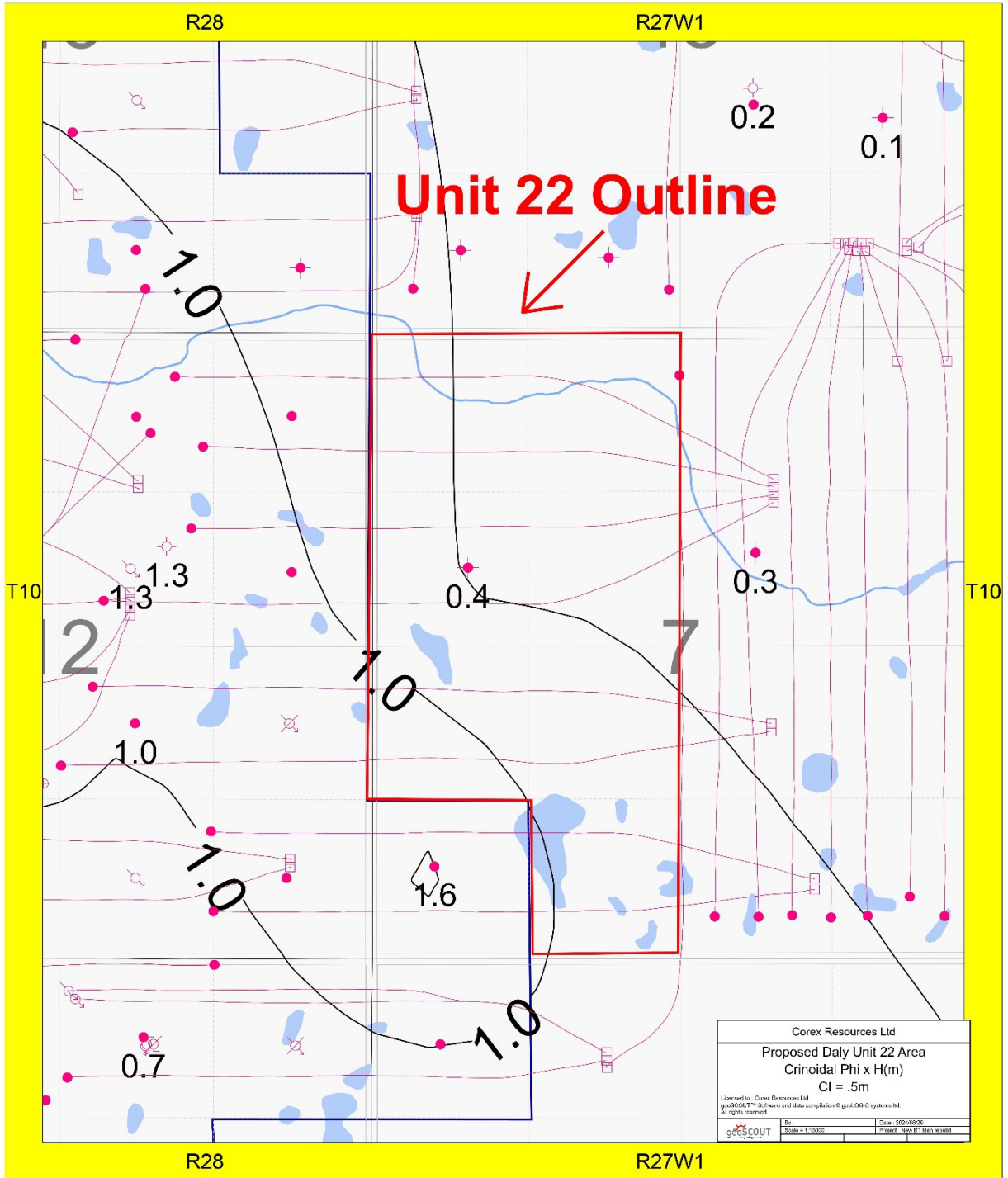
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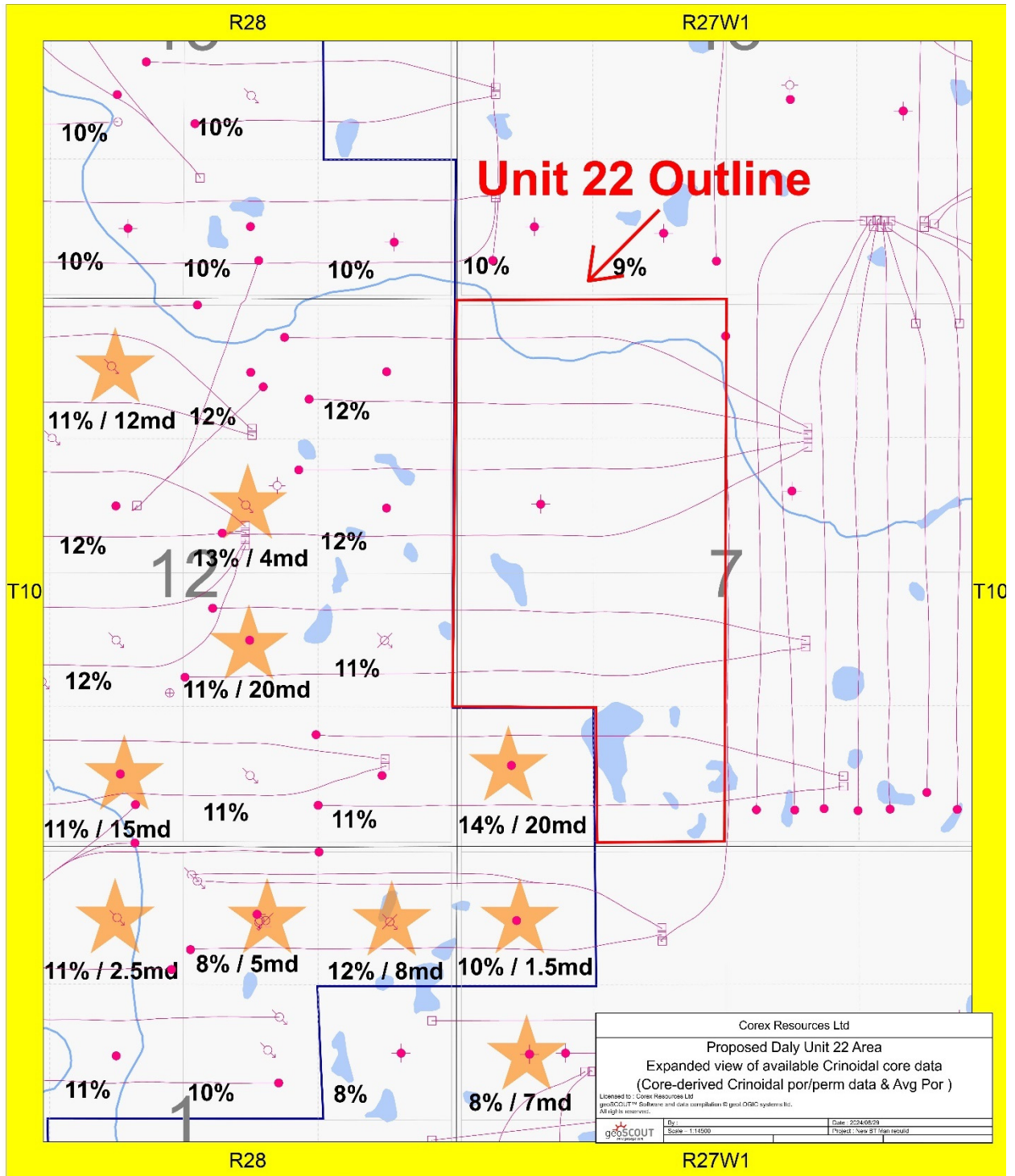


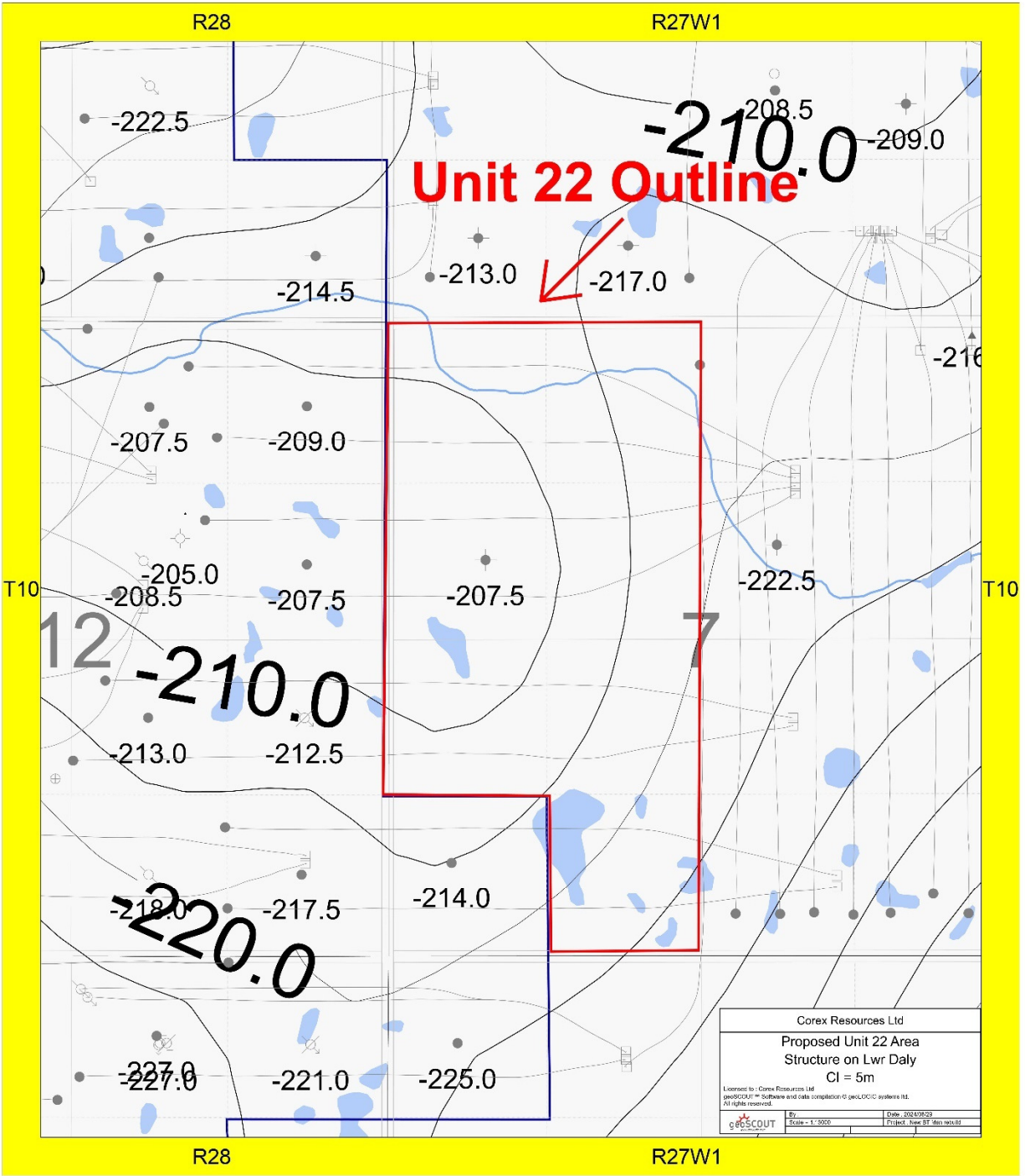


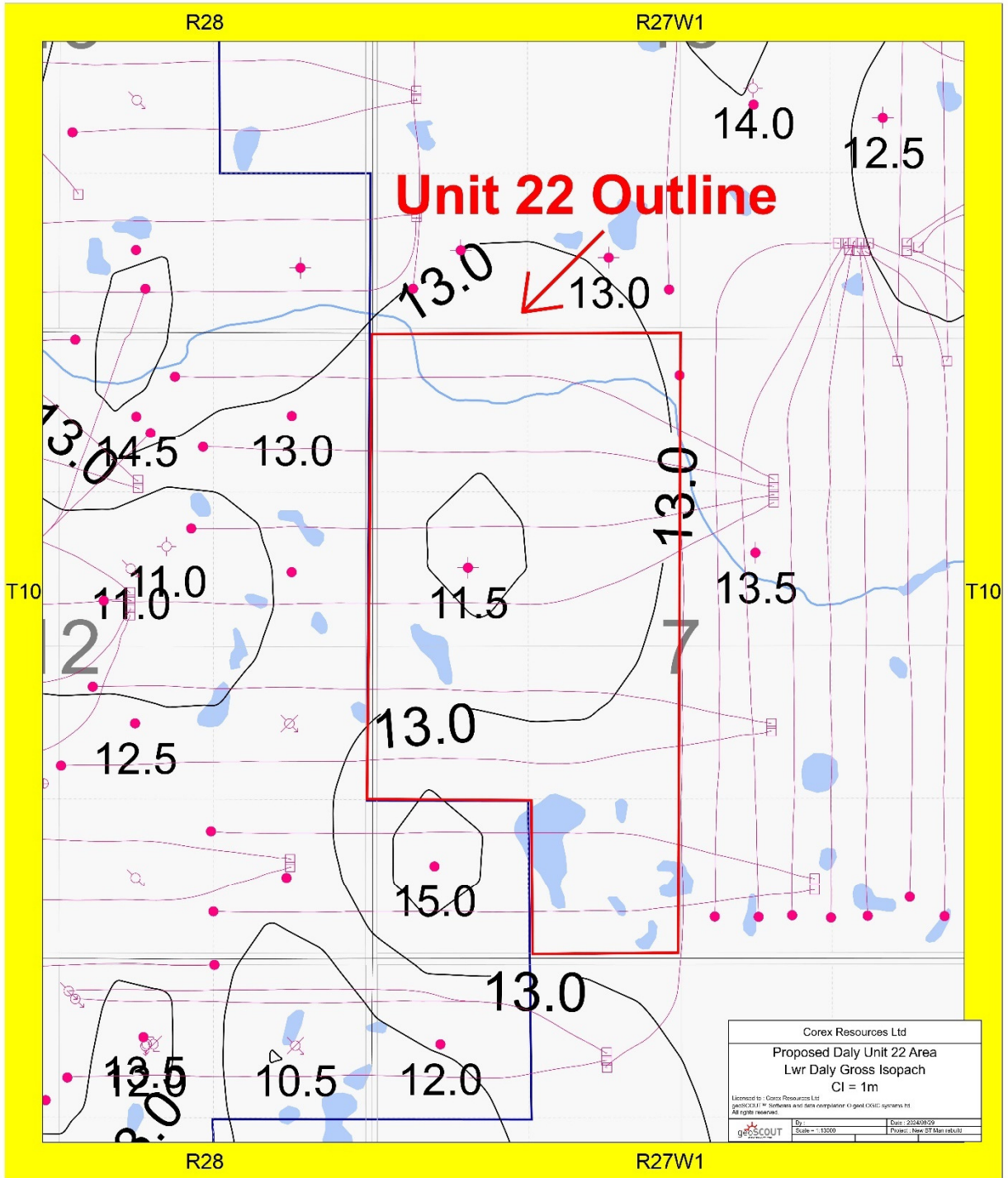


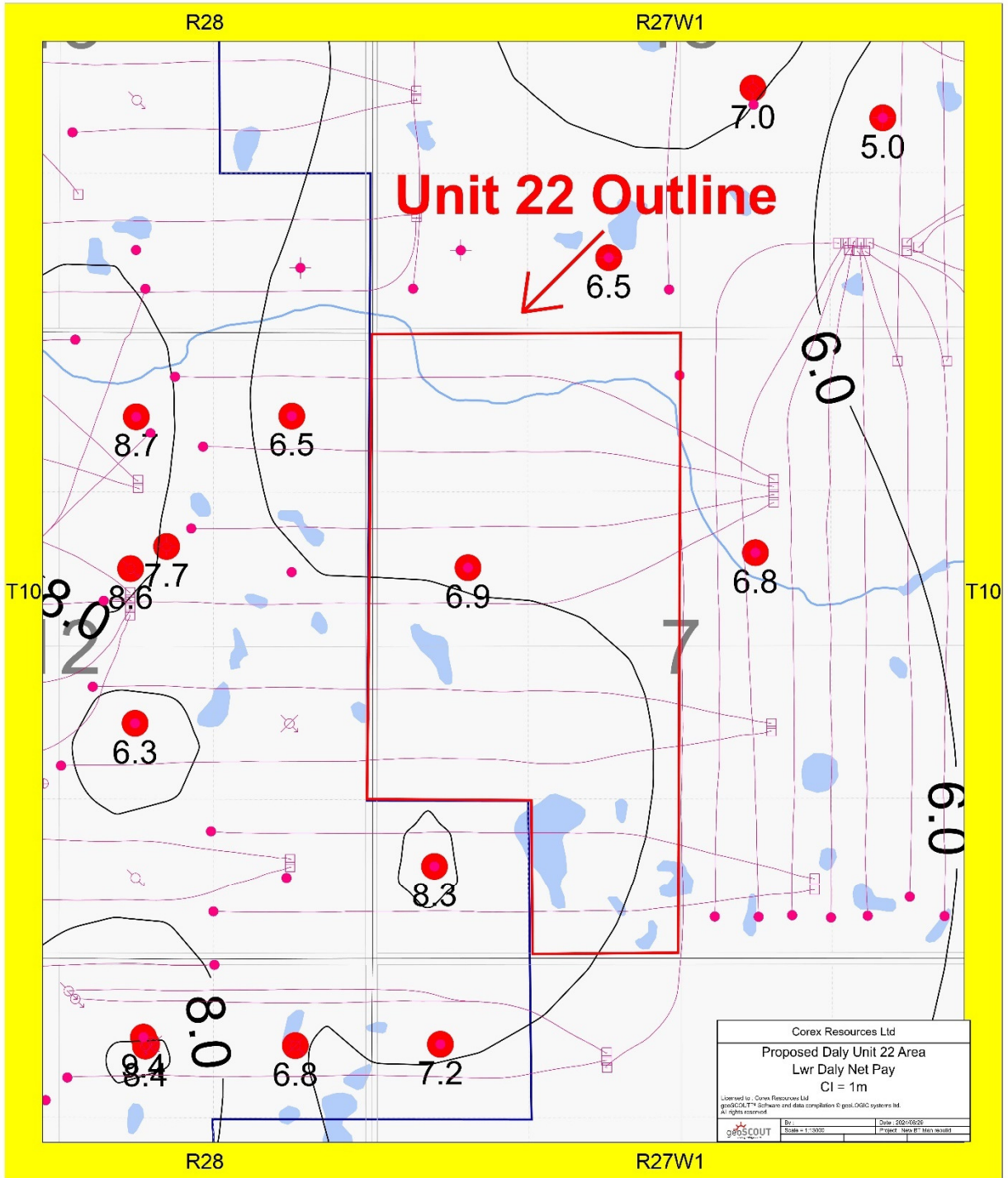


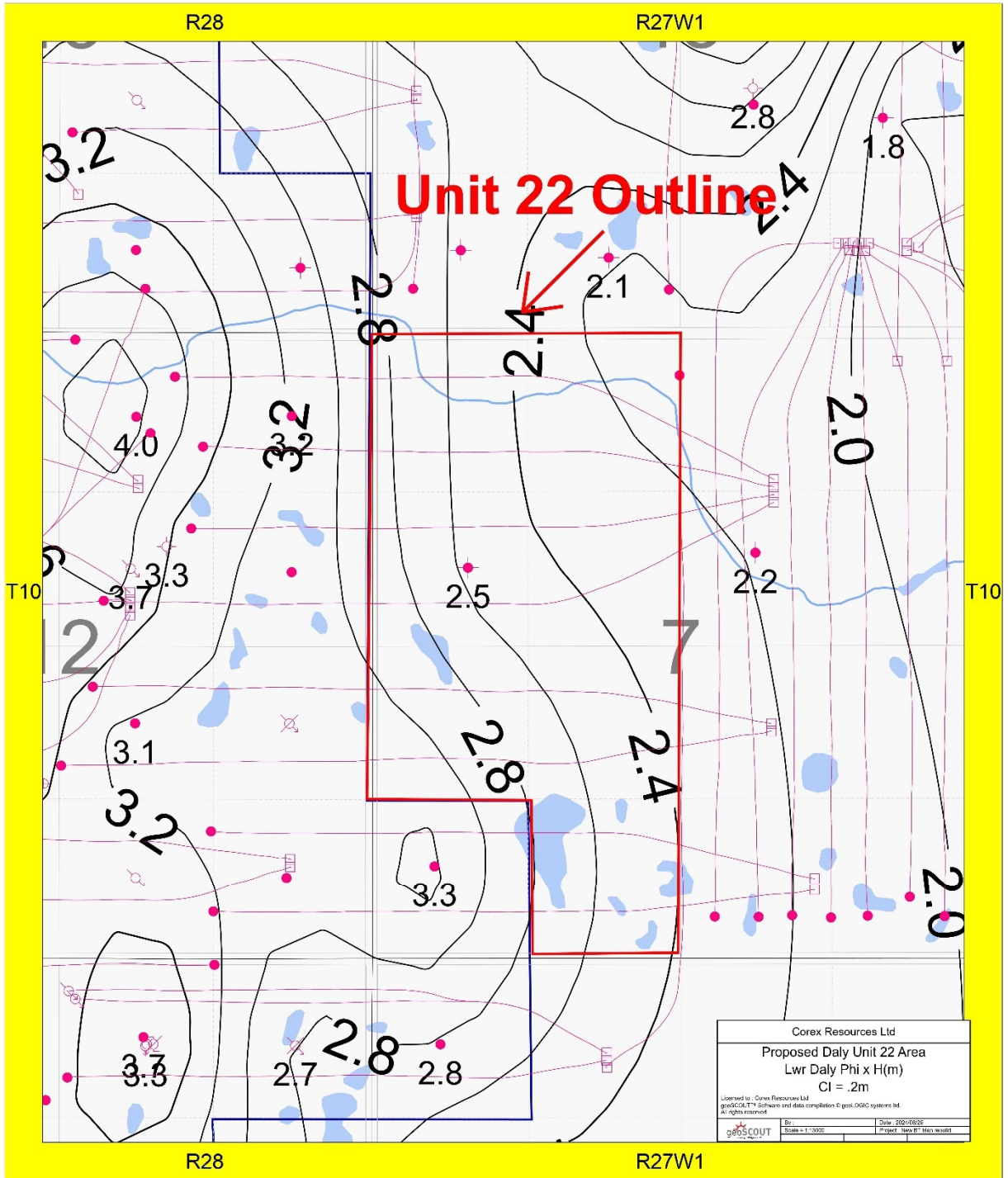


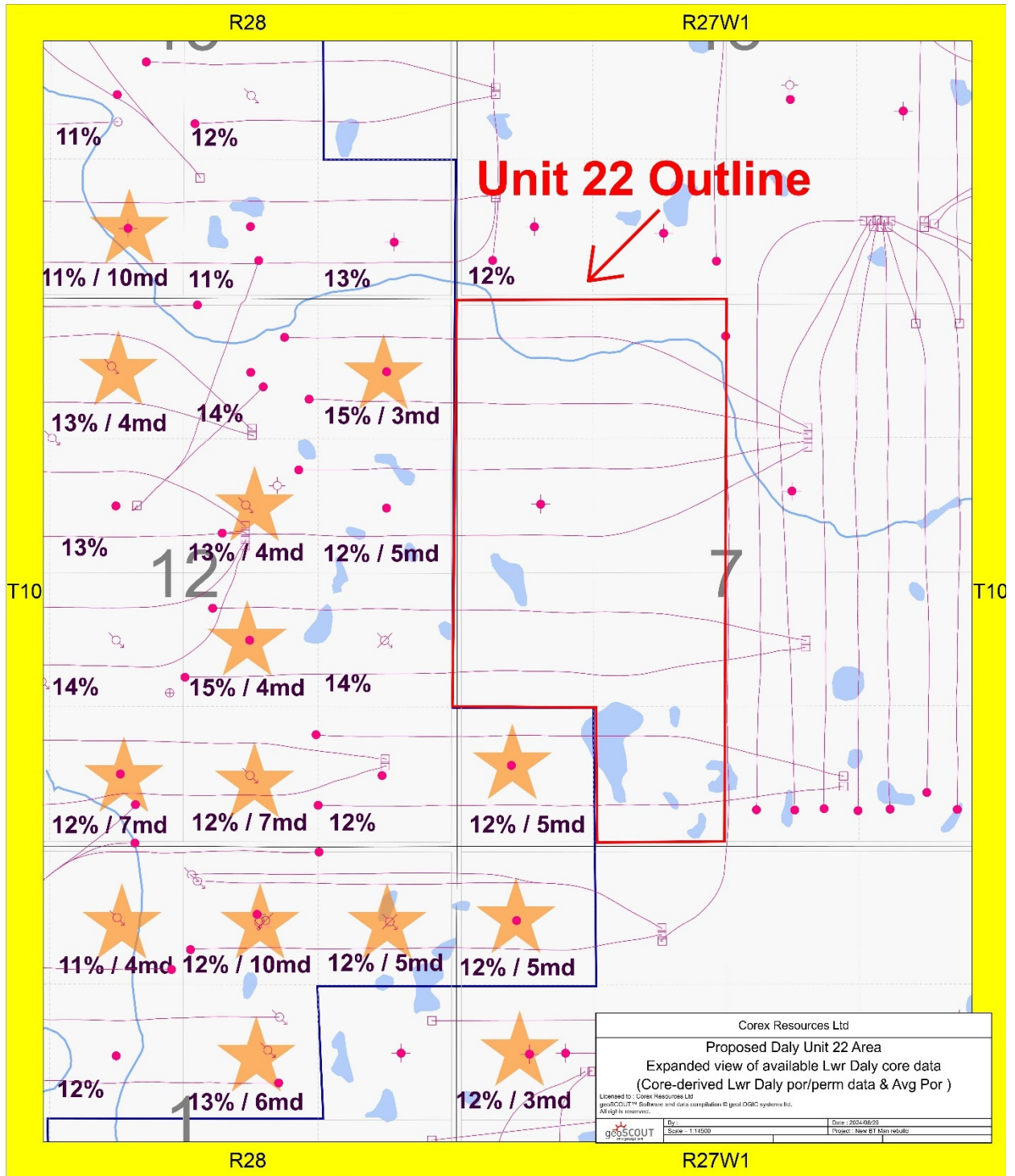


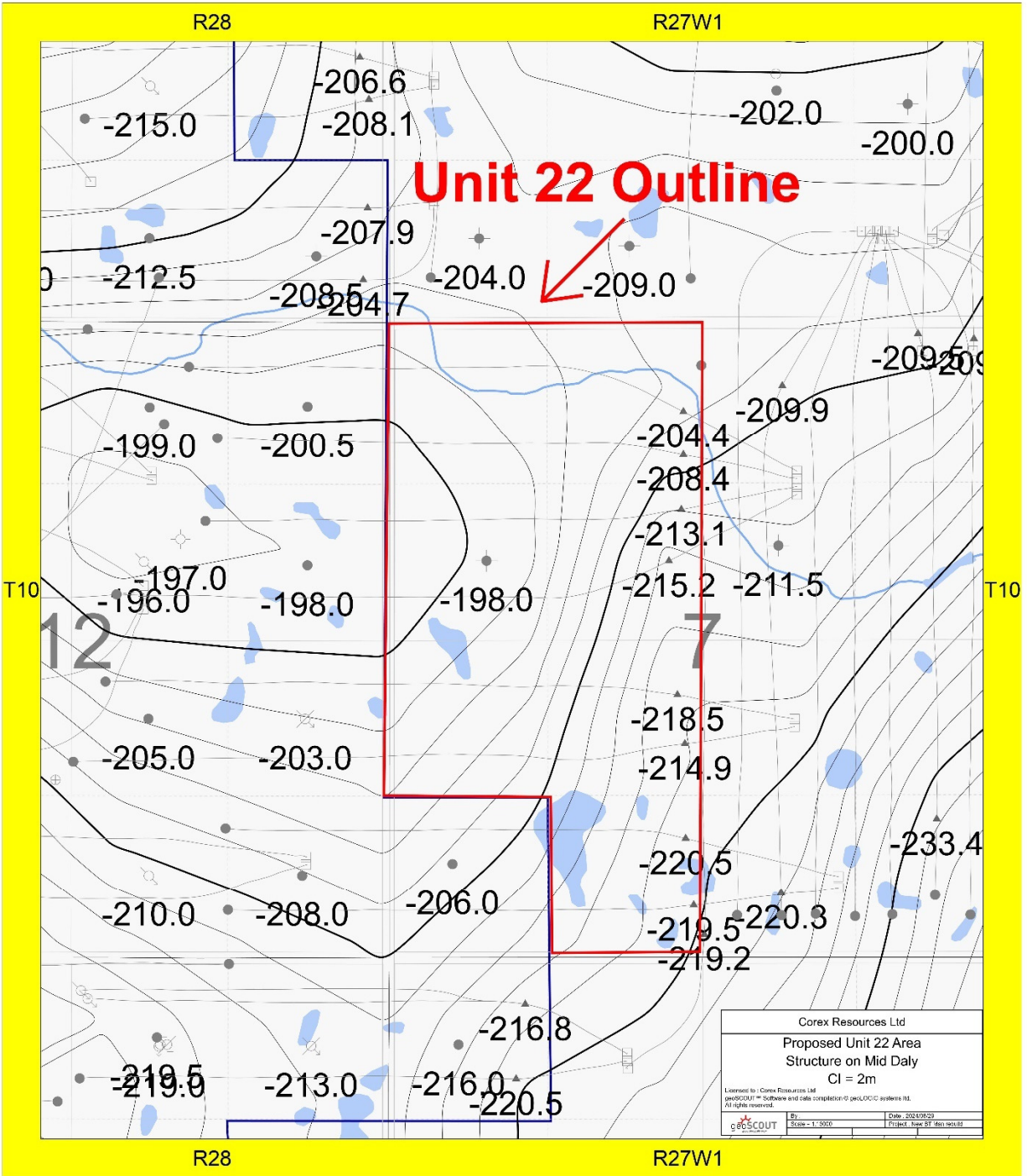


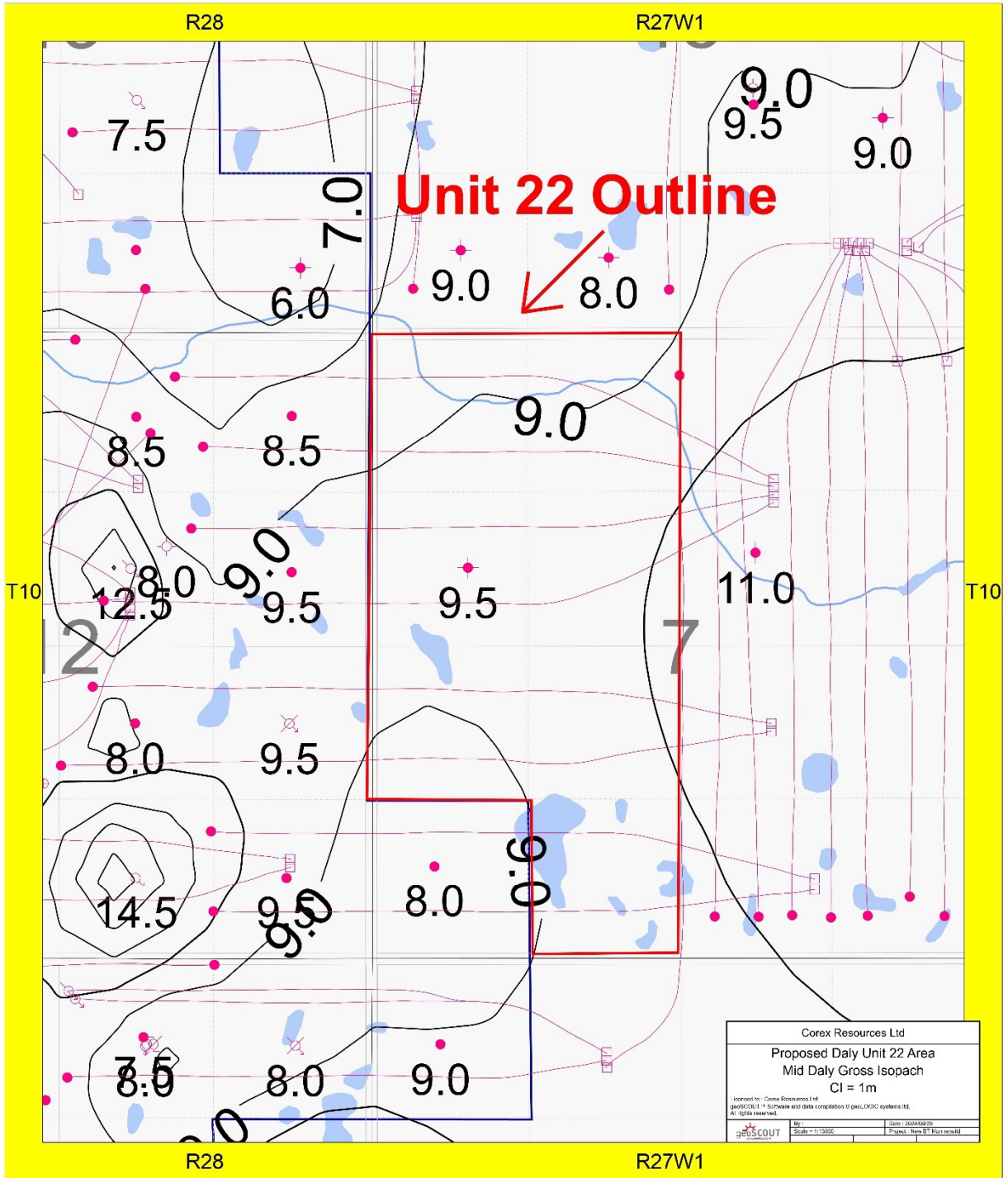


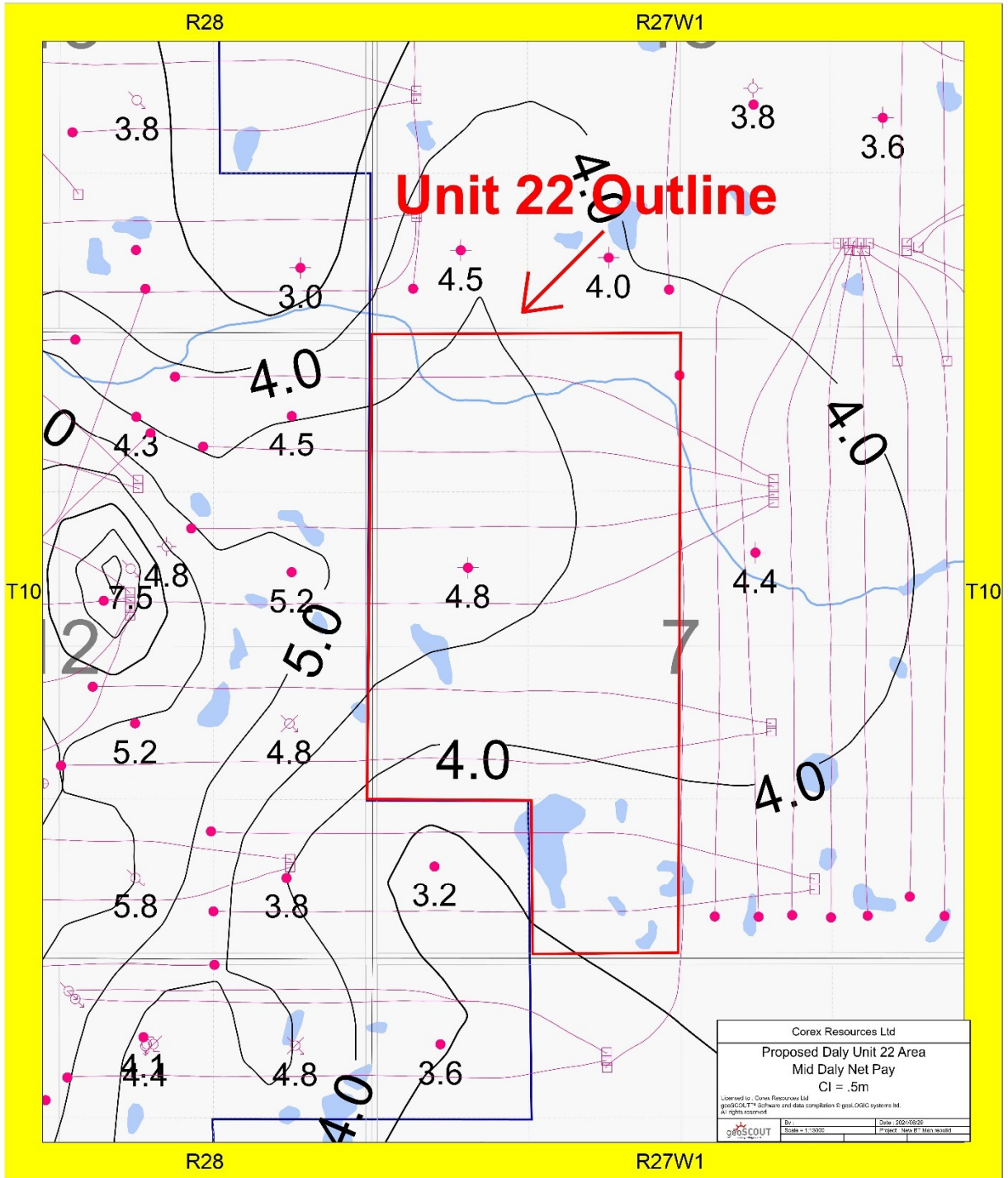


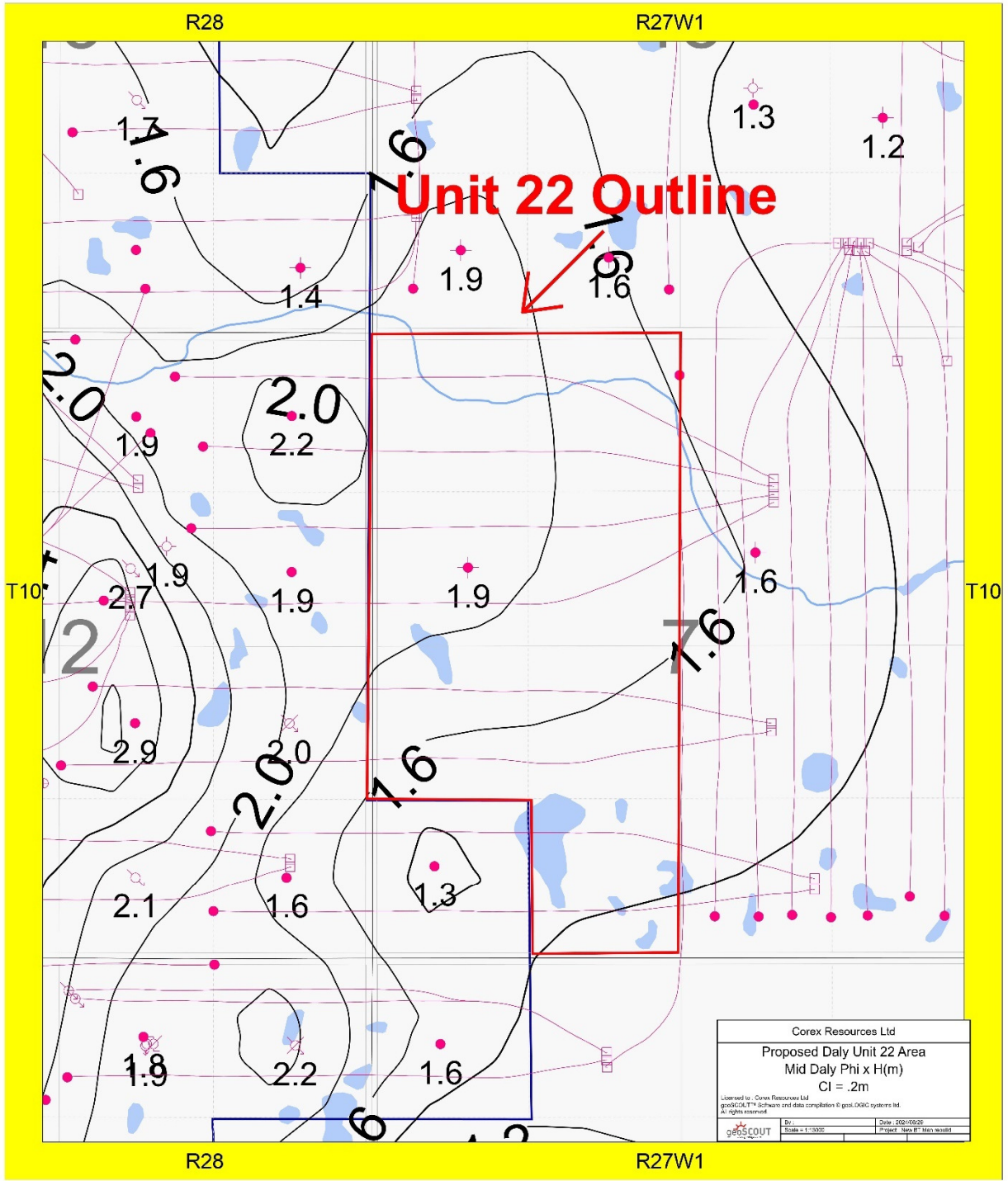


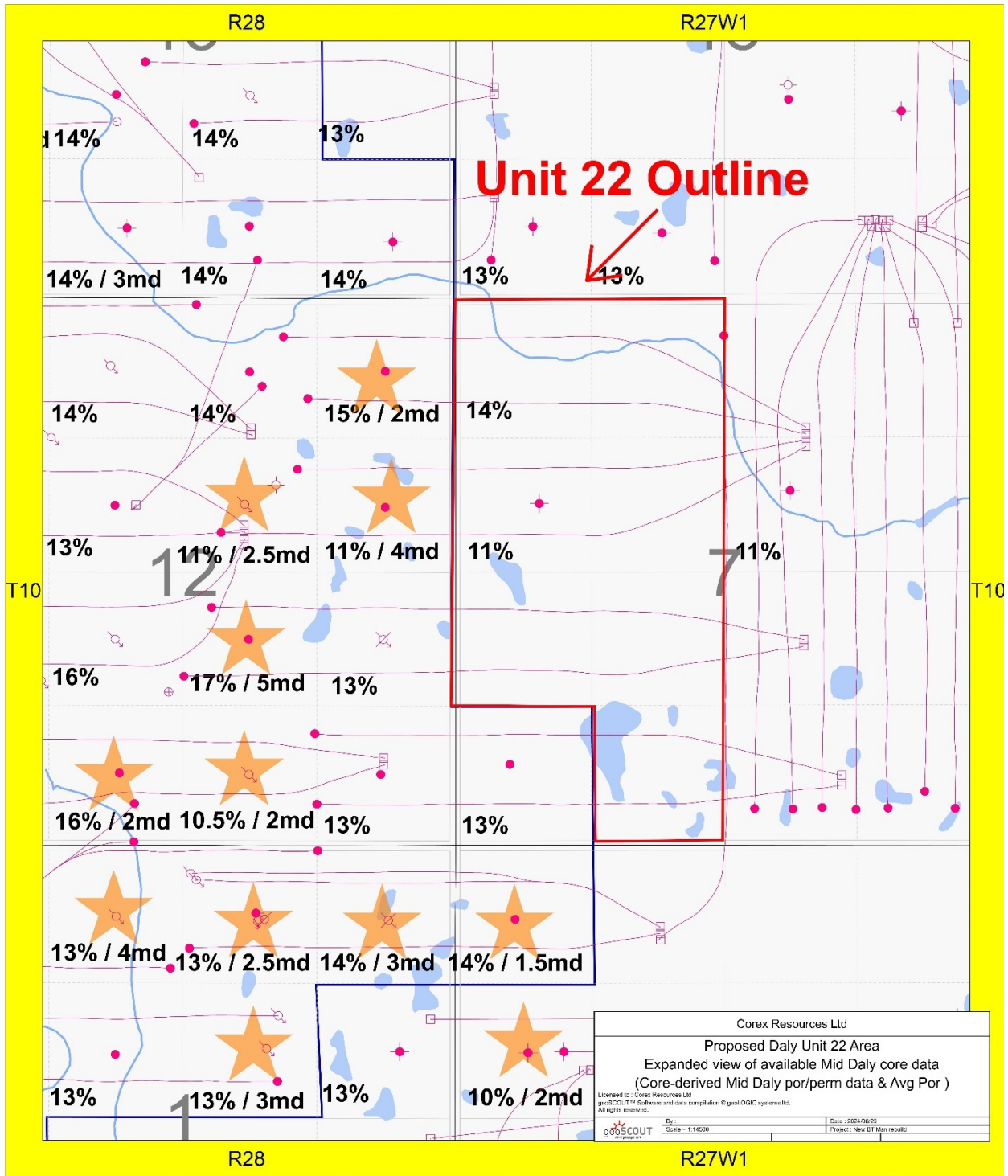


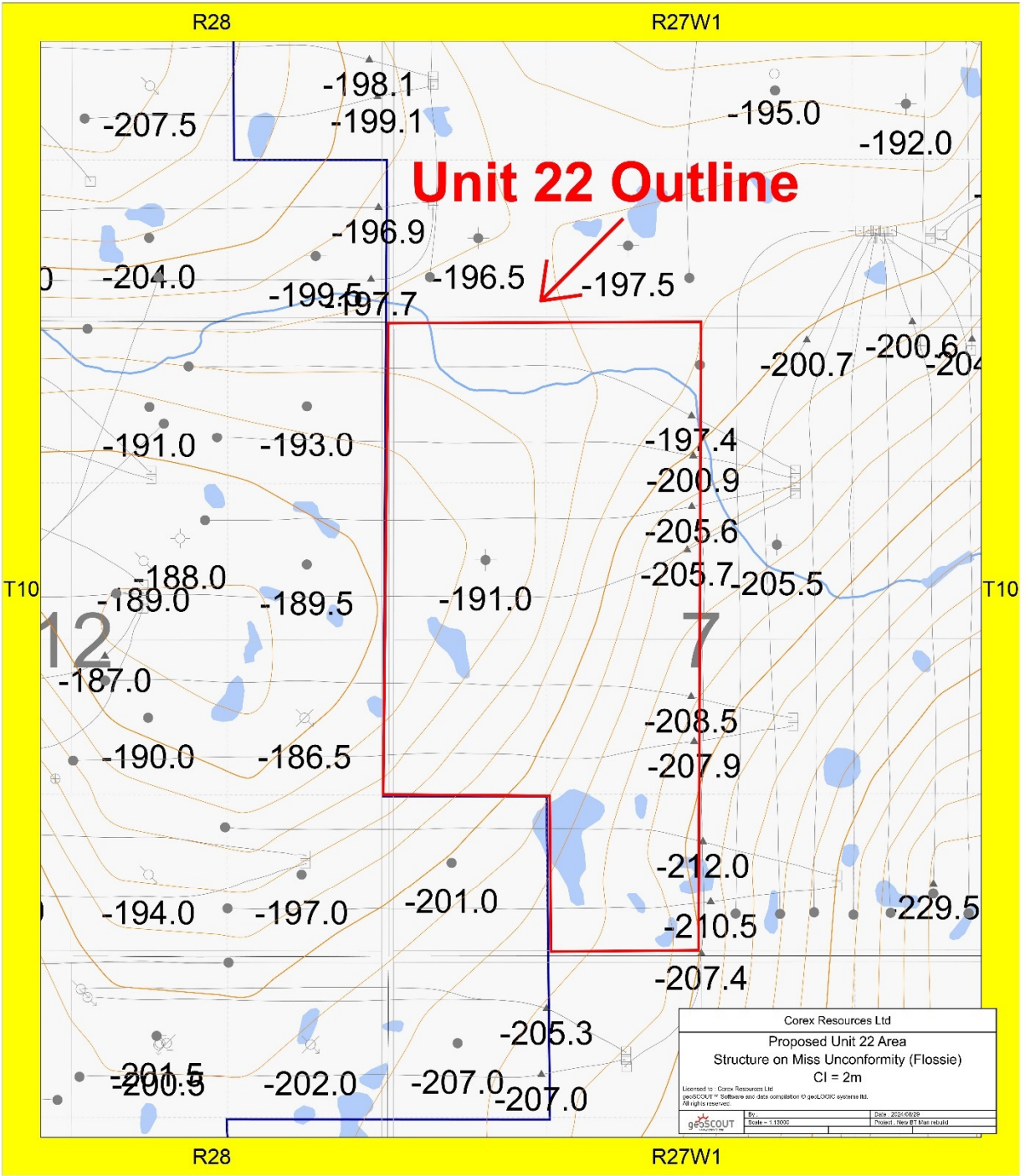


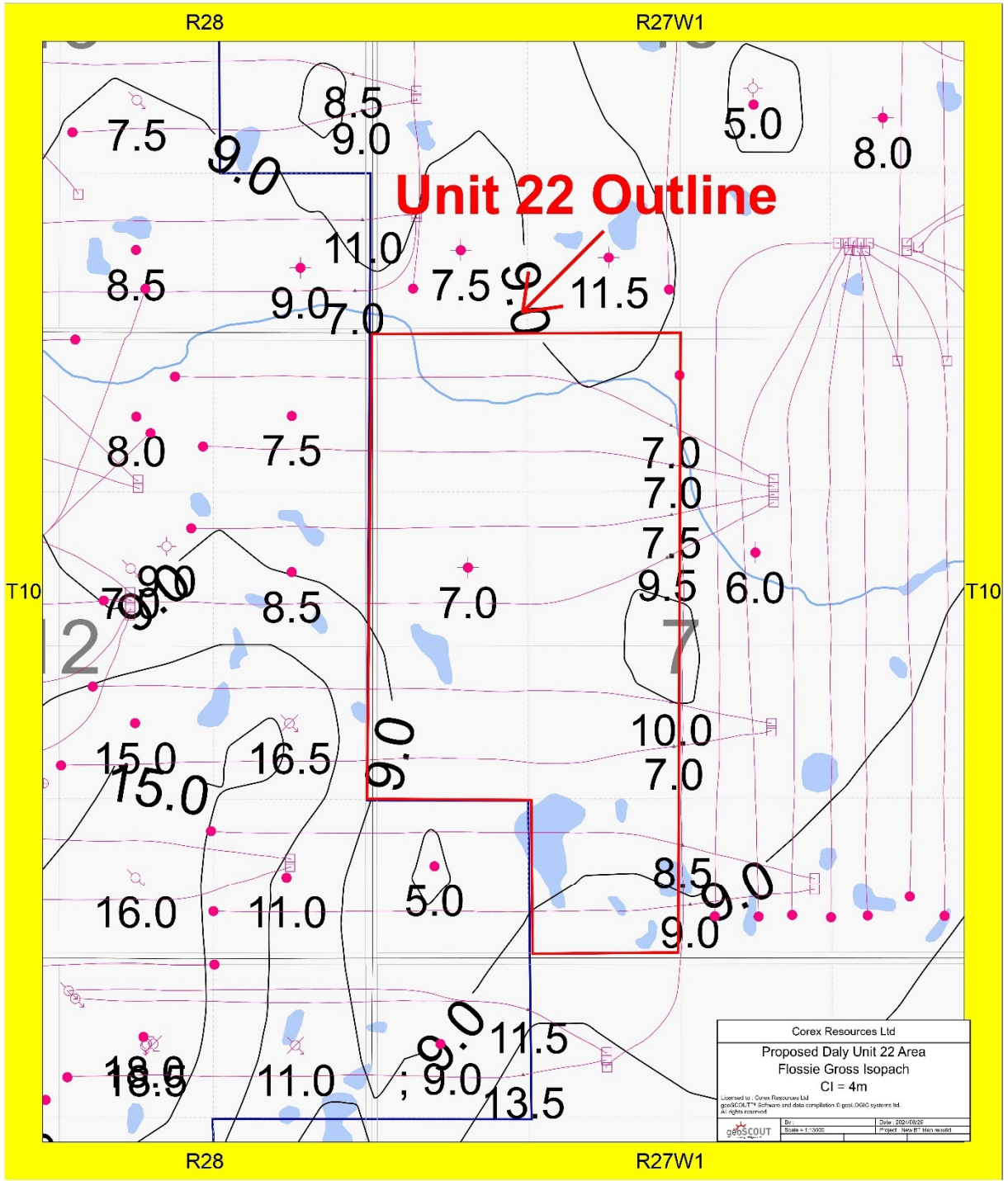


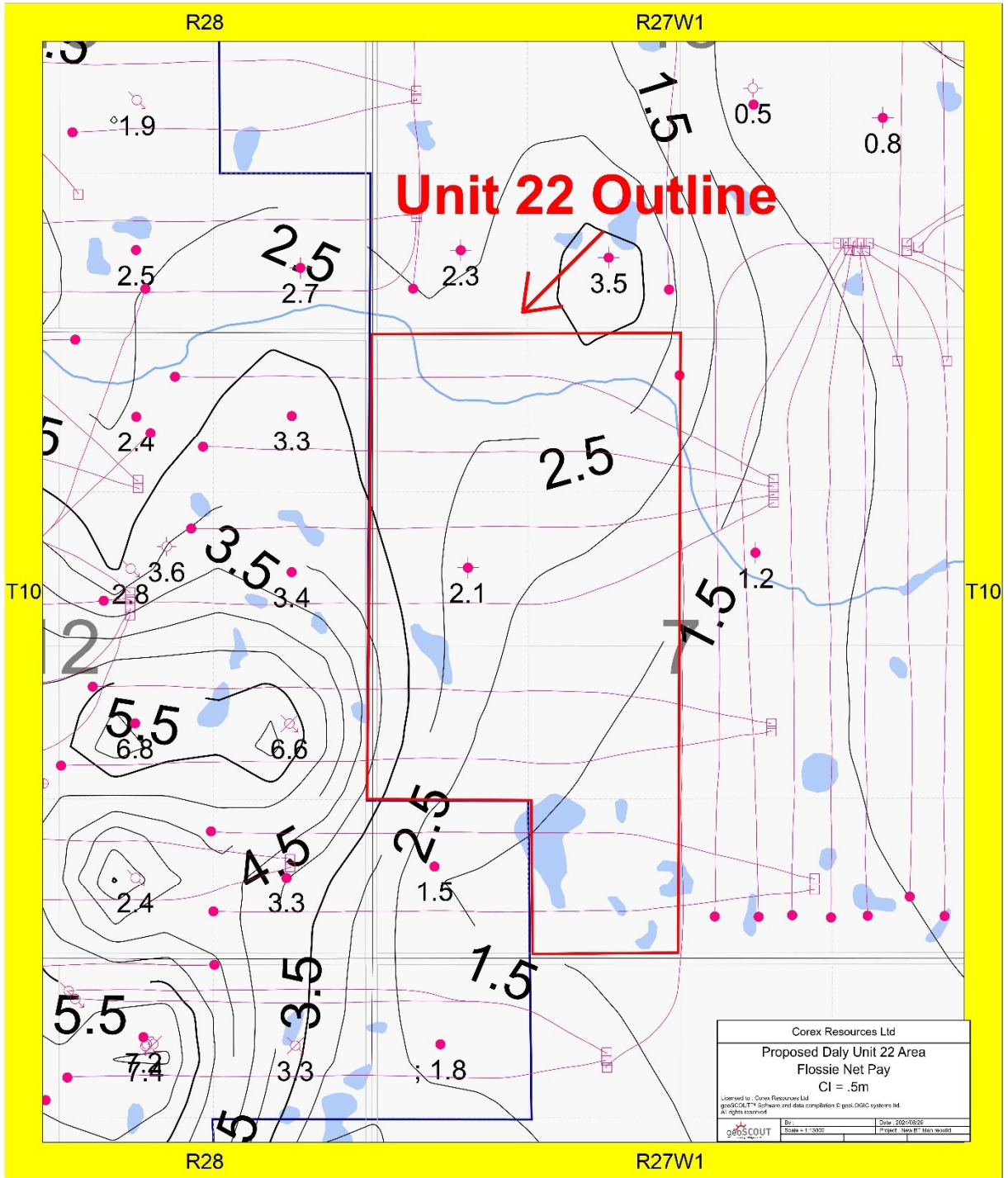


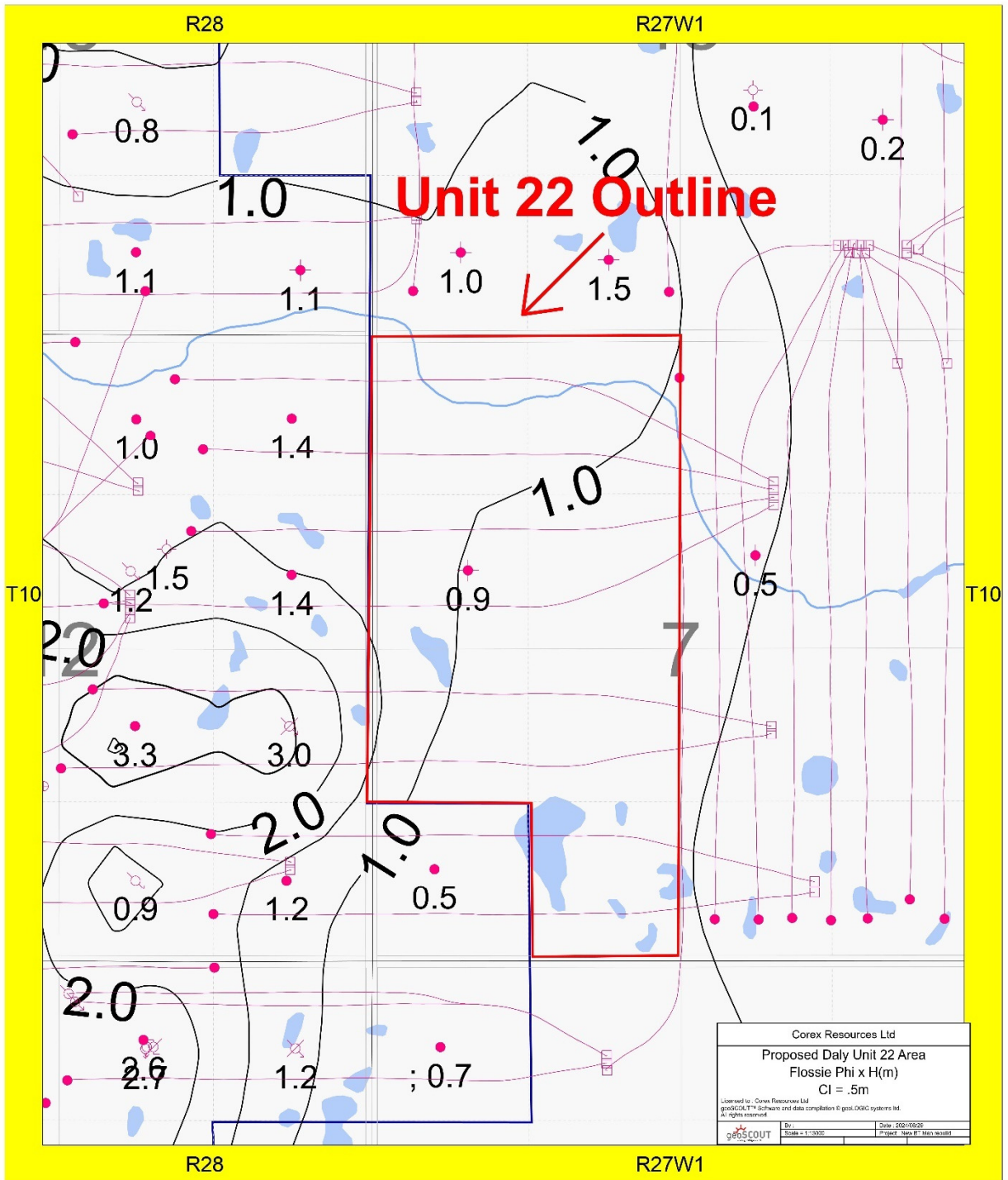


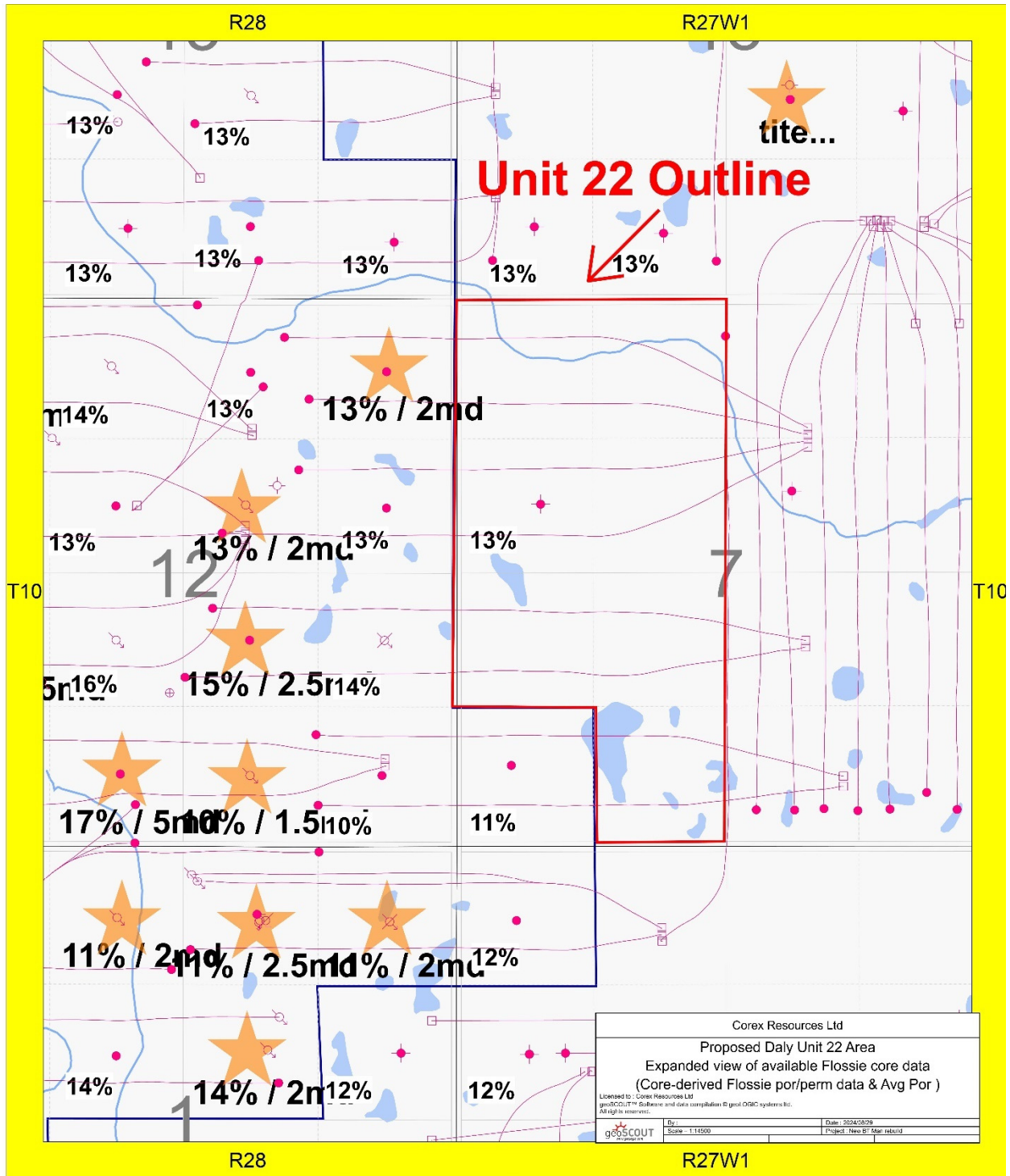




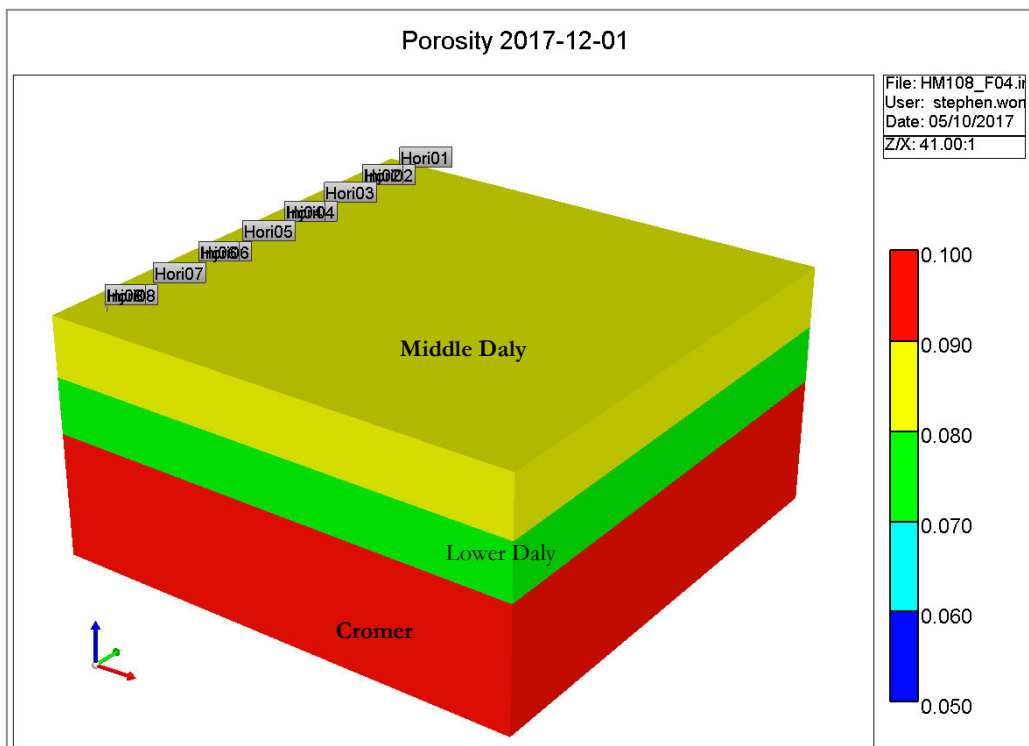


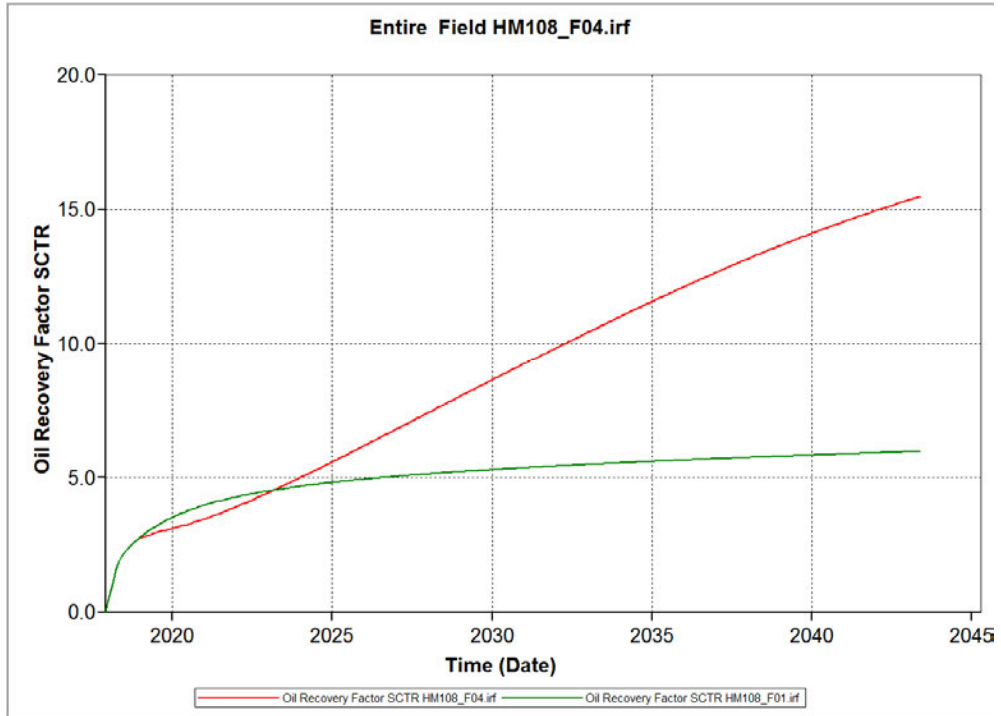






Appendix XXII – Daly Members – Section Model





Section Model – Daly Members – Primary and Secondary Forecast – Oil Recovery Factor versus Time -This Model Was Used to Scale Results for the Daly Unit No. 22 Area

