

LORIS H HASSALL TRADING PTY LTD – FORBES



ANNUAL PERFORMANCE SYSTEM REPORT 2014

EPL # 12765

REPORTING PERIOD:

12-NOV-2013 to 11-NOV-2014

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LITRES IRRIGATED

POINT 1 , 2 , 5 MONTHLY ph / Conductivity

MAP OF 5 MONITORING POINTS

EPA MONITORING FREQUENCY

POINT 1,2,5				
	Pollutant	Units of measure	Frequency	Sampling Method
<u>1</u>	BOD	milligrams per litre	Quarterly	Grab Sample
<u>2</u>	Chloride	milligrams per litre	Quarterly	Grab Sample
<u>3</u>	CONDUCTIVITY	decisiemens per metre	Monthly/Quarterly	In situ
<u>4</u>	NITROGEN (total)	milligrams per litre	Quarterly	Grab Sample
<u>5</u>	OIL AND GREASE	milligrams per litre	Quarterly	Grab Sample
<u>6</u>	p H	p H	Monthly/Quarterly	In situ
<u>7</u>	PHOSPHORUS (total)	milligrams per litre	Quarterly	Grab Sample
<u>8</u>	POTASSIUM	milligrams per litre	Quarterly	Grab Sample
<u>9</u>	SODIUM	milligrams per litre	Quarterly	Grab Sample
POINT 3				
	Pollutant	Units of measure	Frequency	Sampling Method
<u>1</u>	CONDUCTIVITY	milligrams per litre	Quarterly	In situ
<u>2</u>	NITROGEN (total)	milligrams per litre	Quarterly	Grab Sample
<u>3</u>	p H	p H	Quarterly	In situ
<u>4</u>	PHOSPHORUS (total)	milligrams per litre	Quarterly	Grab Sample
POINT 4				
	Pollutant	Units of measure	Frequency	Sampling Method
<u>1</u>	AVAILABLE PHOSPHORUS	milligrams per kilogram	Yearly	Speical Method 1
<u>2</u>	CONDUCTIVITY	microsiemens per centimetre	Yearly	Speical Method 1
<u>3</u>	Exchangeable sodium %	percent	Yearly	Speical Method 1
<u>4</u>	NITRATE	milligrams per litre	Yearly	Speical Method 1
<u>5</u>	NITROGEN (total)	milligrams per kilogram	Yearly	Speical Method 1
<u>6</u>	p H	p H	Yearly	Speical Method 1

POINT 1 =- IRRIGATION PIT

TURN ON AND SAMPLE IS COLLECTED AT BOTTOM OF PIT. TIP PART INTO EACH BOTTLE.
 REPEAT EVERY 1/2 HOUR UNTIL SESL BOTTLES ARE FULL

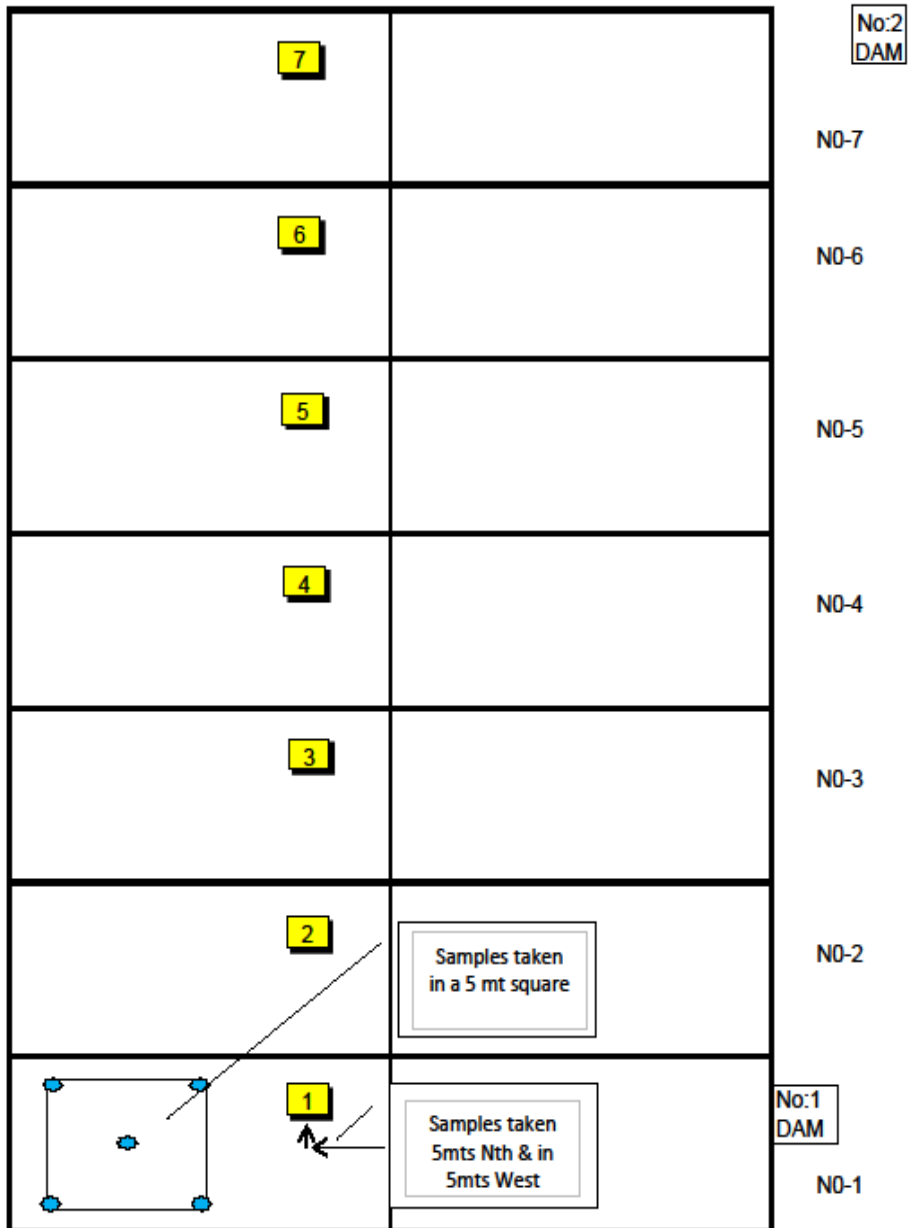
POINT 2 & 5 = EVAP DAMS.

TAKE SAMPLE FROM DEEP AS POSSIBLE , TIP PART INTO EACH BOTTLE.
 REPEAT AT HALF DEPTH AND THEN JUST BELOW SURFACE UNTIL SESL BOTTLES ARE FULL, SEAL AND LABEL

COMPOSITE SOIL POINT 4

5 SAMPLES TO BE TAKEN
 25m2 AREA x 7 BAYS AT
 DEPTHS OF 0>10 CM +
 10>40CM
 SEAL AND LABEL

SOIL SAMPLING SITES



LH HASSALL TRADING P/L 812 PARKES RD. FORBES NSW

EPA REGISTER LINK:

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LICENCE # 12765



EFFLUENT ANALYSIS RECORD SHEET

REVISION:0

Refer **NEW POINTS FOR TESTING SITE PLAN AUG-18**

DATE: 3-12-14

PUBLISHED: 11/10/2018

POINT 1 - IRRIGATION PIT							
ANALYSIS	19/02/2014	22/04/2014	18/08/2014	17/11/2014	HIGH	LOW	AVE
BOD - mg/L	1688	1125	1700	4100	4100	1125	2153
Chloride - mg/L	4499	1500	3785	1632	4499	1500	2854
Total Kjeldahl Nitrogen - mg/L	784	538	190	640	784	190	538
Oil & Grease (LLE) - mg/L	271	304	18	33	271	18	157
Total Phosphorus - mg/L	25	12.7	17	18	25	12.7	18
Potassium mg/L	95	57	87.6	123	123	57	91
Electrical Conductivity - µS/cm	16630	1838			16630	1838	9234
Conductivity - deciSiemens / MT			14.75	9.67	14.75	9.67	12
Sodium - mg/L	2563	9220	2990.5	147	9220	147	3730
(Ph)	9.8	10.04	11.6	8.2	11.6	8.2	10

DATE TAKEN:

TIME TAKE:

TAKEN BY:

SESL REPORT:

19/02/2014	22/04/2014	18/08/2014	14/11/2014
8:00 AM	7:15 am	7:00 AM	7:30 AM
MARK	MARK	MARK	MARK
26/02/2014	5/05/2014	5/09/2014	3/12/2014

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EVAPORATION DAM MONITORING RECORD

[LICENCE # 12765](#)

REVISION:0

DATE: 3-12-14

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POINT 2 - EVAPORATION DAM					SML LINED		
UNIT OF MEASURE	18/02/2014	21/04/2014	18/08/2014	17/11/2014	HIGH	LOW	AVE
BOD - mg/L	9000	7500	80500	13000	80500	7500	27500
Chloride - mg/L	179944	170947	139652.9	89100	179944	89100	144911
Total Kjeldahl Nitrogen - mg/L	1750	1375	350	1000	1750	350	1119
Oil & Grease (LLE) - mg/L	718	965	<5	<5	965	>5	175
Total Phosphorus - mg/L	224	202	150	210	224	202	197
Potassium mg/L	1850	1214	1522.2	1720	1850	1214	1577
Electrical Conductivity - µS/cm	583500	595000			595000	583500	589250
Conductivity - deciSiemens / MT			493	146	493	146	320
Sodium - mg/L	102602	11485	115434.3	115000	115434	11485	86130
(Ph)	7.41	7.01	7.1	6.9	7.41	6.9	7

DATE TAKEN:
 TIME TAKE:
 TAKEN BY:
 SESL REPORT:

18/02/2014	21/04/2014	18/08/2014	17/11/2014
7.30 am	8:00 AM	7.30 am	7.30 am
MARK	MARK	MARK	MARK
26/02/2014	5/05/2014	5/09/2014	3/12/2014

POINT 5 - EVAPORATION DAM					LGE LINED		
UNIT OF MEASURE			18/08/2014	17/11/2014	HIGH	LOW	AVE
BOD - mg/L			79500	17000	79500	1700	48250
Chloride - mg/L	EMPTY		93587.1	82500	93587.1	82500	88043.55
Total Kjeldahl Nitrogen - mg/L			440	1300	1300	440	870
Oil & Grease (LLE) - mg/L			33	<5	33	>5	14
Total Phosphorus - mg/L			120	210	210	120	165
Potassium mg/L			1653.5	2670	2670	1653.5	2161.75
Electrical Conductivity - µS/cm			338	155	338	155	246.5
Sodium - mg/L			74976.5	109000	109000	74976.5	91988.25
(Ph)			7.1	6.9	7.1	6.9	7

DATE TAKEN:
 TIME TAKE:
 TAKEN BY:
 SESL REPORT:

		18/08/2014	17/11/2014
		8:00 AM	8:00 AM
		MARK	MARK
		5/09/2014	3/12/2014

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 PIEZOMETER ANALYSIS RECORD LICENCE # 12765

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ANALYSIS	PIEZOMETER 1					PIEZOMETER 2				
	Mar-14	Sep-14	HIGH	LOW	AVE	Mar-14	Sep-14	HIGH	LOW	AVE
Chromium Total - mg/L										
Electrical Conductivity - µS/m										
Nitrogen Total - mg/L										
pH - pH units										
Phosphorus Total - mg/L										
Redox Potential										
Standing Water Level - m										
Sulphide - mg/L										
ANALYSIS	PIEZOMETER 3					PIEZOMETER 4				
	Mar-14	Sep-14	HIGH	LOW	AVE	Mar-14	Sep-14	HIGH	LOW	AVE
Chromium Total - mg/L										
Electrical Conductivity - µS/m										
Nitrogen Total - mg/L										
pH - pH units										
Phosphorus Total - mg/L										
Redox Potential										
Standing Water Level - m										
Sulphide Total - mg/L										
ANALYSIS	PIEZOMETER 5					PIEZOMETER 6				
	Mar-14	Sep-14	HIGH	LOW	AVE	Mar-14	Sep-14	HIGH	LOW	AVE
Chromium Total - mg/L										
Electrical Conductivity - µS/m										
Nitrogen Total - mg/L										
pH - pH units										
Phosphorus Total - mg/L										
Redox Potential										
Standing Water Level - m										
Sulphide Total - mg/L										

DATE TAKEN:	4/03/2014	9/09/2014
TIME TAKE:	10:00 AM	11:00 AM
TAKEN BY:	MARK	MARK
SESL REPORT:	NA	NA

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EFFLUENT IRRIGATED POINT 1 LICENCE # 12765

REVISION: 0
 17/12/2014

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RECORDS DONE DAILY BY WHO EVER
 IS IN CHARGE TO DO IRRIGATING.
 REFER IRRIGATION RECORD SHEETS
 KEPT IN OFFICE.

<i>Lts</i>	<i>No of days</i>	<i>low</i>	<i>high</i>
364574	7	26243	59273
522494	7	55202	131571
595000	7	28000	120000
705192	7	58527	155594
602788	7	41684	120528
626894	7	64560	137715
684306	6	72051	279268
738159	7	67111	168545
829443	7	47367	232663
797361	7	43189	163039
480100	7	40567	99486
658538	7	72200	164352
608569	7	58230	140470
502291	6	48063	118023
595244	7	22398	133089
704761	7	27732	128263
582892	7	41484	116652
705836	7	67767	140161
695773	7	25049	109440
654652	7	82028	114989
624458	7	51283	117546
464916	7	28579	112616
744186	7	83664	130618
456414	6	18880	102474
636247	6	94691	125963
673633	7	42516	130712
724768	7	93754	127053
641883	7	69043	109957
671306	6	36235	189412
795306	7	93393	129132
804465	7	96955	131631
832408	7	87025	167208
557256	6	82981	150100
609774	7	69675	155140
851384	7	104529	127322
918003	7	106529	145108
Total Lts	23,661,274	246	
No. times irrigated	246		
Av: Lts	96184.0		

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EFFLUENT ANALYSIS RECORD SHEET LICENCE # 12765

PH / COND. POINT 1,2,5 PUBLISHED: 11/10/2018

MONTHLY 2013 > 2014



EFFLUENT PIT:			EVAP DAM:			EFFLUENT PIT:			ALL BY:			
	ph	cond		ph	cond		ph	cond				
	9.52	15000	8AM	13/12/2013	9.86	705000	8AM	13/12/2013	10.4	650000	8AM	MARK
	11.02	18000	8.30AM	16/01/2014	6.62	615000	8.30AM	16/01/2014	11.3	634000	8.30AM	MARK
	9.8	16000	9AM	19/02/2014	7.41	398000	9AM	19/02/2014	9.63	625000	9AM	MARK
	10.04	15000	10AM	27/03/2014	7.01	382000	10AM	27/03/2014	10.6	320000	10AM	MARK
	9.5	15000	9.30AM	28/04/2014	7.7	622000	9.30AM	28/04/2014	9.8	345000	9.30AM	MARK
	10.1	21000	1PM	27/05/2014	6.56	656000	1PM	27/05/2014	11.2	463000	1PM	MARK
	9.9	17000	10AM	24/06/2014	7.2	620000	10AM	24/06/2014	9.62	654000	10AM	MARK
	10.12	23000	11AM	22/07/2014	7	625000	11AM	22/07/2014	9.96	632200	11AM	MARK
	12.15	19000	2PM	18/08/2014	7.6	620000	2PM	18/08/2014	11.6	615000	2PM	MARK
	10.16	20320	10AM	15/09/2014	7.4	380000	10AM	15/09/2014	10.4	625000	10AM	MARK
	12.54	15540	9AM	17/10/2014	7.16	395000	9AM	17/10/2014	12.5	632500	9AM	MARK
	11.5	9360	8.30AM	13/11/2014	7.28	60500	8.30AM	13/11/2014	10.5	396000	8.30AM	MARK
	12.35	198220			88.80	6878500			127.53	7193700		
AV:	10.53	16318		AV:	7.40	573208		AV:	10.63	399475		
LOW:	9.5	15000		LOW:	6.56	38000		LOW:	9.5	463000		
HIGH:	12.54	23000		HIGH:	9.86	705000		HIGH:	12.54	634000		

