2015 - 2016

Appendix E Current water sampling points

2015 - 2016

Current water sampling points surface water monitoring KVAR 2010 - 2016

Site #	Nalco site ID	Reported origin	Aspect	Sample ID	Note	Easting	Northing
2	Lend Lease	Clean Water Runoff & Holding Pond	North Pond	CW Pond Runoff 2	Monthly	230112	6302059
3	88	Surface Water Runoff Collection	Internal ash surface runoff	SW Pond 1	Monthly		
4	87	West KVAD Wall subsurface	Groundwater through-flow	WX 50 Outflow	Monthly	229661	6302244
5	Lend Lease	Clean Water Collection near compound	Clean Water Runoff Pond 1	Clean Water Runoff- 1	Monthly	229396	6301834
6	Lend Lease	KVAR North Holding Pond	Groundwater seepage, and stormwater runoff	North Holding Pond	Monthly	230225	6302106
7	38	Sawyers Swamp Creek Ash Dam	Dam water	Return Water Canal	Monthly	229765	6301461
8	79	Sawyers Swamp Creek Ash Dam	SSCAD seepage into SSC	Seepage @ V notch	Monthly	230260	6302287
9	41	Sawyers Swamp Creek Lower	Catchment Quality Comparison	SSC @ WX7	Monthly	228957	6302712
10	Lend Lease	Inflow of Sawyers Swamp Ck 0 m	Catchment Quality Comparison	SSC Upstream @ 0 m	Indicative	230386	6301545
11	Lend Lease	Sawyers Swamp Creek @ 300 m	Catchment Quality Comparison	SSC @ 300m	Monthly	230284	6301969
12	Lend Lease	Sawyers Swamp Creek @ 600 m	Catchment Quality Comparison	SSC @ 600m	Monthly	230253	6302120
13	84	Sawyers Swamp Creek @ 800 m	Catchment Quality Comparison	SSC @ 800m	Monthly	229954	6302256
14	83	Sawyers Swamp Creek @ 1250 m (nr D5)	Catchment Quality Comparison	SSC @ 1200 m	Monthly	229650	6302253
16	39	Dump Creek	Catchment Quality Comparison	DC	Monthly	229112	6302668
17	80	West KVAD Wall surface right	KVAD Toe Drain seepage	Right	Monthly	229662	6302177
18	81	West KVAD Wall s surface left	KVAD Toe Drain seepage	Left	Monthly	229688	6302194
40	40	Lidsdale Cut	Catchment Quality Comparison	LC @ WX5	Monthly	229490	6302227

Groundwater le	evel	monitoring	for	KVAR	2010 - 2016	
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Site #	Nalco site ID	Reported origin	Aspect	Sample ID	Note	Easting ²	Northing ²
8	75	Groundwater Bore GW10	KVAD West Wall	GW10 ²	Toe Drains	229754	6302228
9	76	Groundwater Bore GW11	KVAD West Wall	GW11 ²	Toe Drains	229612	6301994
11	78	Groundwater Bore AP17	KVAD North Wall	AP17 ²	Toe Drains	229915	6302193
19	Lend Lease	South West KVAR subsurface	Groundwater through-flow	Sump 1	Monthly	229441	6301496
20	Lend Lease	East KVAD Wall subsurface	Groundwater through-flow1	Sump 2	Monthly	230218	6302032
21	32	Groundwater Bore WGM1/D1	Regional	D12	Upstream	231988.5	6301410
22	33	Groundwater Bore WGM1/D2	Regional	D22	South East	229680	6301387.7
23	34	Groundwater Bore WGM1/D3	Regional	D32	East below SCAD	230276.1	6301753.2
24	35	Groundwater Bore WGM1/D4	Regional	D42	NE corner SSC	230160.7	6302349.8
27	85	Groundwater Bore GW6	KVAD	GW62	North West at SSC	229754	6302228
31	86	North KVAD Wall subsurface	Groundwater through-flow	North Wall	Monthly	229908	6302216
32	Lend Lease	Groundwater Well APA02	KVAR Stage 2A – Level	APA02	Stage 1A KVAR	229890	6301839.4
33	Lend Lease	Groundwater Well APA09A	KVAR Stage 2A - Level	APA09A	Stage 2A above clay cap north	229849	6302125.4

2015 - 2016

Site #	Nalco site ID	Reported origin	Aspect	Sample ID	Note	Easting ²	Northing ²
34	Lend Lease	Groundwater Well APA09B	KVAR Stage 2A - Level	APA09B	Stage 2A KVAD north	229849.5	6302125.7
35	Lend Lease	Groundwater Well APA10	KVAR Stage 2A - Level	APA10	Stage 2A KVAD west	229694.1	6302054.4
36	36	Groundwater Bore WGM1/D5	Regional	D52	Downstream	229642.5	6302205.9
36	Lend Lease	Groundwater Well APA11	KVAR Stage 2A - Level	APAD11	Stage 2A KVAD subsurface drain	229930	6301886
37	37	Groundwater Bore WGM1/D6	Regional	D62	Up dip coal seam	229412	6302027.8
37	Lend Lease	Groundwater Well APA12	KVAR Stage 2A - Level	APAD12	Stage 2A KVAD subsurface drain	229916	6301846
38	Lend Lease	Groundwater Well APA13	KVAR Stage 2A - Level	APAD13	Stage 2A KVAD subsurface drain	229985	6301931
39	Lend Lease	Groundwater Well APA14	KVAR Stage 2A	APAD14	Stage 2A KVAD subsurface drain	230024	6301949
41	Lend Lease	Groundwater Well APA16A	KVAR Stage 2A	APAD16	Stage 2A KVAD subsurface drain	230174	6301968
42	Lend Lease	Groundwater Well APA17	KVAR Stage 2A	APAD17	Stage 2A KVAD subsurface drain	230169	6301969
43	Lend Lease	Groundwater VWP ¹ APA08	KVAR Stage 2A	APA08	Stage 2A above clay cap	229731.2	6301943.1
44	Lend Lease	Groundwater VWP ¹ APA07	KVAR Stage 2A	APA07	Stage 2A above clay cap	229891.3	6302057.1
45	Lend Lease	Groundwater VWP ¹ APA06	KVAR Stage 2A	APA06	Stage 2A above clay cap	230019.4	6302054.3
46	Lend Lease	Groundwater VWP ¹ APA04	KVAR Stage 2A	APA04	Stage 2A above clay cap	229955.8	6301987.5

2015 - 2016

Site #	Nalco site ID	Reported origin	Aspect	Sample ID	Note	Easting ²	Northing ²
47	Lend Lease	Groundwater BH Cent KV_MB	Regional	KV_MB1D	Upslope adjacent to SSCAD	230604.2	6301288.2
48	Lend Lease	Groundwater BH Cent KV_MB	Regional	KV_MB1S	Upslope adjacent to SSCAD	230600	6301290
49	Lend Lease	Groundwater BH Cent KV_MB	Regional	KV_MB6D	KVAR Stage 2B	229982.9	6301782.6
50	Lend Lease	Groundwater BH Cent KV_MB	Regional	KV_MB6S	KVAR Stage 2B	229986.9	6301784.6
51*	Lend Lease	Groundwater BH Cent KV_MB	Regional	KV_MB8A	Offsite comparison un- disturbed	229166.4	6301607.4
52	Lend Lease	Centre APA Stage 1 and Stage 2	KVAR Stage 2A	Sump 3	Stage 2B		
53	Lend Lease level only	Groundwater Well 01	Groundwater through-flow	2012-PVC01	KVAR Stage 1	229468.21	6301620.1
54	Lend Lease level only	Groundwater Well 02	Groundwater through-flow	2012- PVC-02	KVAR Stage 1	229612.67	6301629.2
55	Lend Lease level only	Groundwater Well 03	Groundwater through-flow	2012- PVC-03	KVAR Stage 1	229564.84	6301717.9
56	Lend Lease level only	Groundwater VWP ¹ 04	Groundwater through-flow	2012-VWP-04	KVAR Stage 1	229708.16	6301675.2
57	Lend Lease level only	Groundwater VWP ¹ 05	Groundwater through-flow	2012-VWP-05	KVAR Stage 1	229815.42	6301684.6
58	Lend Lease level only	Groundwater VWP ¹ 06	Groundwater through-flow	2012-VWP-06	KVAR Stage 1	229768.96	6301784.4
59	Lend Lease level only	Groundwater VWP ¹ 07	Groundwater through-flow	2012-VWP-07	KVAR Stage 1	229683.52	6301792.7
60	Lend Lease level only	Groundwater Well 08	Groundwater through-flow	2012- PVC-08	KVAR Stage 1	229811.22	6301829.9

Report Title: KVAR Stage 2 Annual Environmental Management Report 2015-2016 Objective ID: A895130

2015 - 2016

Site #	Nalco site ID	Reported origin	Aspect	Sample ID	Note	Easting ²	Northing ²
61	Lend Lease level only	Groundwater VWP ¹ 09	Groundwater through-flow	2012-VWP-09	KVAR Stage 1	229851.8	6301752.8
62	Lend Lease	Groundwater Well APA15	KVAR Stage 2A	APAD15	Stage 2A KVAD subsurface drain	230159	6301948

¹ VWP – Vibrating Wire Piezometer – Pressure Transducer located in fly ash

 $^{\rm 2}$ Water Quality Monitoring Results Available Groundwater KVAR Site - 2010 to 2011

* Previously Centennial Coal bores- now sampled by EnergyAustralia NSW

Water level measured only